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ABSTRACT

The report addresses itself to the Elementary and Secondary Education Act Title I projects operated via the Bureau of Indian Affairs. Phoenix Area, during fiscal 1971. Projects are classified by components in the cognitive, psychomotor, and affective domains (e.g., reading, physical fitness, and dropout reduction). Within each component, project statistics are followed by a discussion of the evaulation results. Because the success of any program is based upon the correction of the problem areas encountered, the chapter containing the summary, conclusions, and recommendations is followed by a discussion of fiscal 1972, which presents specific modifications designed to improve new projects in the Phoenix Area. (LS)

TITLE I

Project Evaluations

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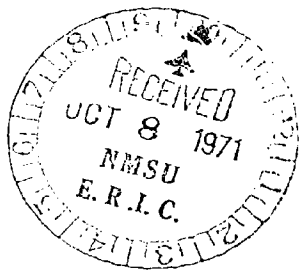
PHOENIX AREA
BUREAU OF INDIAN AFFAIRS
FY-71



REPORT OF FINAL EVALUATION

ESEA TITLE I PROJECTS

FISCAL YEAR 1971

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS, EDUCATION

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SEPTEMBER 1971

A C K N O W L E D G E M E N T S

A deep debt of gratitude is extended to the many Indian people, the various faculties, the school administrators, and the support personnel who unselfishly devoted their time to the creation and implementation of the Title I programs during Fiscal 1971. Through their understanding and dedication to the intent and spirit of Title I, an important inroad has become a reality. A beginning - the most difficult aspect of all journeys - toward meeting the special educational needs of Indian children has evolved. This cooperative effort among parents, students, and educators, and more importantly, the mutual understanding which has occurred will continue to benefit the many Indian students whom we all serve.

Special thanks is extended to the Salt River Pima-Maricopa Indian Community Council which made this report possible.

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P R E F A C E

This report addresses itself to the Title I projects operated in the Bureau of Indian Affairs, Phoenix Area, during Fiscal 1971.

For the reader who may not be cognizant of the organization of the Bureau, an overview of the geographical location of Areas within the Bureau of Indian Affairs will be given along with the organization of the Bureau at large and the Phoenix Area. Enrollment in the Phoenix Area is presented by day and boarding schools, elementary and high schools, grade level, and tribes.

Since the understanding of Title I is contingent upon the knowledge of the intent of the legislation, its guidelines and regulations, special attention will be given to the background of Title I of the Elementary and Secondary Act of 1965 and subsequent modifications. Additionally, background demographic information is discussed in relation to the Phoenix Area's Title I funding, student participation, staff positions, dissemination of information, accomplishments, and problem areas encountered during Fiscal 1971.

Projects are classified by components in the cognitive, psychomotor, and affective domains, e.g., reading, physical fitness, and drop-out reduction. Within each component vital project statistics are followed by a discussion of the evaluation results.

Because the success of any program is based upon the correction of the problem areas encountered, the summary, conclusion, and recommen-

dations chapter is followed by a discussion of Fiscal 1972, which presents specific modifications designed to improve new projects in the Phoenix Area.

It is the intent of the Phoenix Area, Bureau of Indian Affairs to present an objective evaluation of Fiscal 1971 Title I projects. This report will outline not only the successes but also will point to the problems and difficulties encountered. It is hoped that by objectively representing both sides of the spectrum the reader may share in our experiences both positive and negative by replicating the successes, attacking the problems, and avoiding the difficulties. The desired effect from the reading of this report is the upgrading of special compensatory educational services for educationally deprived children.

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L I S T O F F I G U R E S

THE BUREAU OF INDIAN AFFAIRS
PHOENIX AREA

C H A P T E R I

Introduction

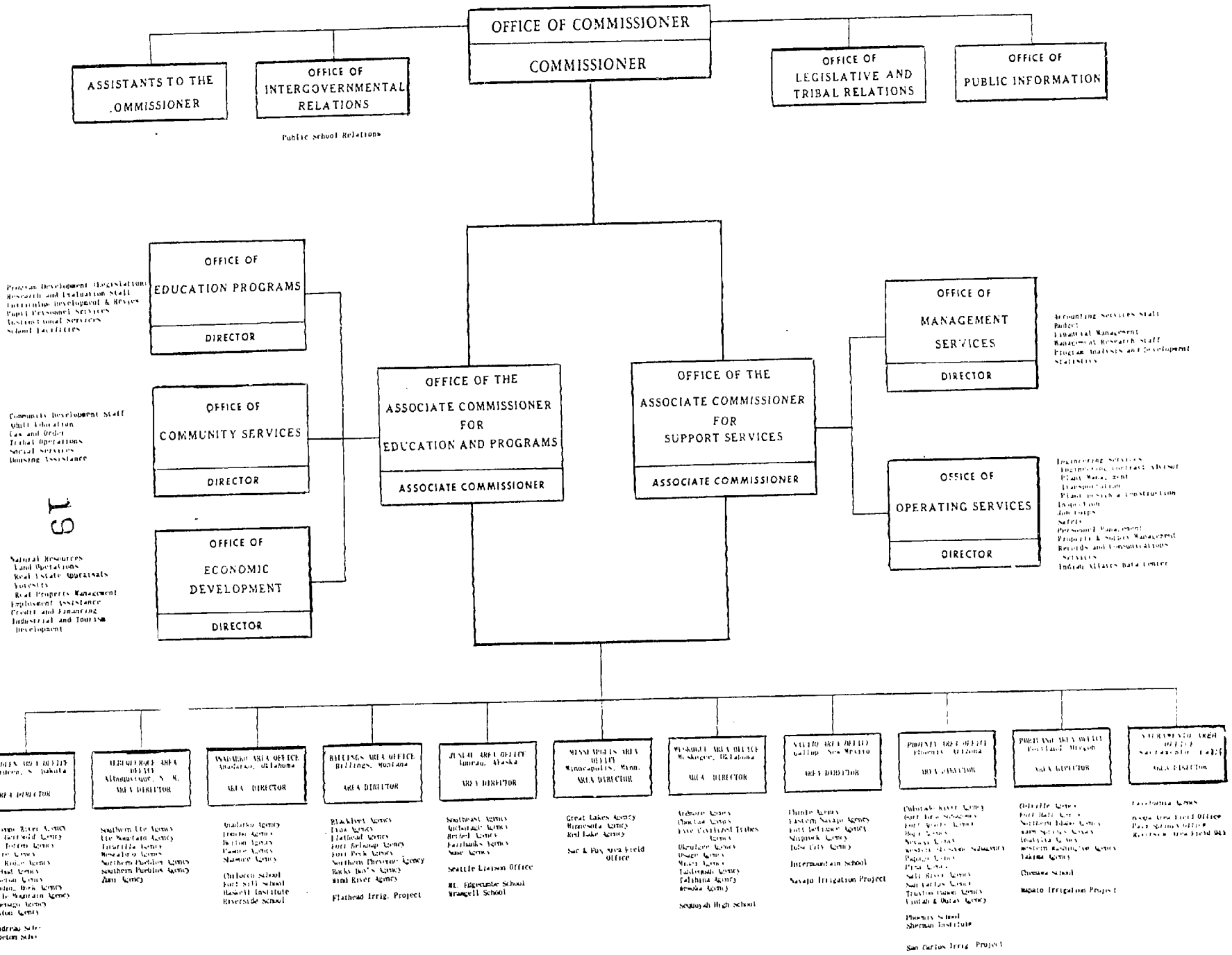
Since 1775, the Federal Government has had jurisdiction over Indian affairs. The responsibility for Indian affairs was first given to the War Department in 1824, then to the Department of Interior in 1849, where it has remained under civilian control.

Although the Federal Government has responsibility over Indian affairs, most Indian children attend public schools. While there are approximately 205,574 school age Indian children, only 185,587 actually attend school. Of the 185,587 Indian students enrolled in schools, 68 percent attend public schools, 25 percent are in Federal schools, and 5 percent attend mission or other types of schools. Approximately 55,000 attend one of the 250 schools operated by the Bureau of Indian Affairs.

As can be seen in Figure I, the responsibility for management of programs within the Bureau of Indian Affairs lies with the Office of the Commissioner, located in Washington, D.C. This office advises Assistants to the Commissioner and the Director of Education Programs, as well as Area Directors within the Bureau.

The Areas within the Bureau are shown on a map of the United States in Figure II. The ten Area Offices are located in seven states with four

Figure I - Organization-Bureau of Indian Affairs



of the Area Offices - Phoenix, Aberdeen, Muskogee, and Navajo - having jurisdication over more than one state. In each Area Office, the Area Director is responsible for all activities including education. The Assistant Area Director (Education) assists in the discharge of educational activities in the schools under the Area Office's jurisdiction.

The Agency Offices represent the third organizational level within the Bureau. The agency superintendent, who reports to the Area Director, is responsible for both short and long range activities on the reservation (e.g., roads, education, industrial development, economic development, community services, and tribal relations). Figure III illustrates the organization of the Phoenix Area by agencies and schools. It may be observed that eleven separate agencies, two subagencies and two school units are served by the Phoenix Area.

Figure IV shows the jurisdiction of the Phoenix Area, and Figure V shows the agencies and schools located under each. As can be noted in Figure V, showing the geographical location of schools in the Phoenix Area, the 21 schools are situated in a three-state region comprised of Arizona, California, and Nevada. With the exception of two off-reservation high schools, all are located in Arizona. The two exceptions are Sherman Indian High School in Riverside, California and Stewart Indian High School in Stewart, Nevada. Phoenix Indian High School, the Area's third boarding high school, is located in the heart of Phoenix, Arizona.

Located in the White Mountains of eastern Arizona are the John F. Kennedy Day School, Cibecue Day School, and Theodore Roosevelt Boarding

Figure III - Organization-Phoenix Area

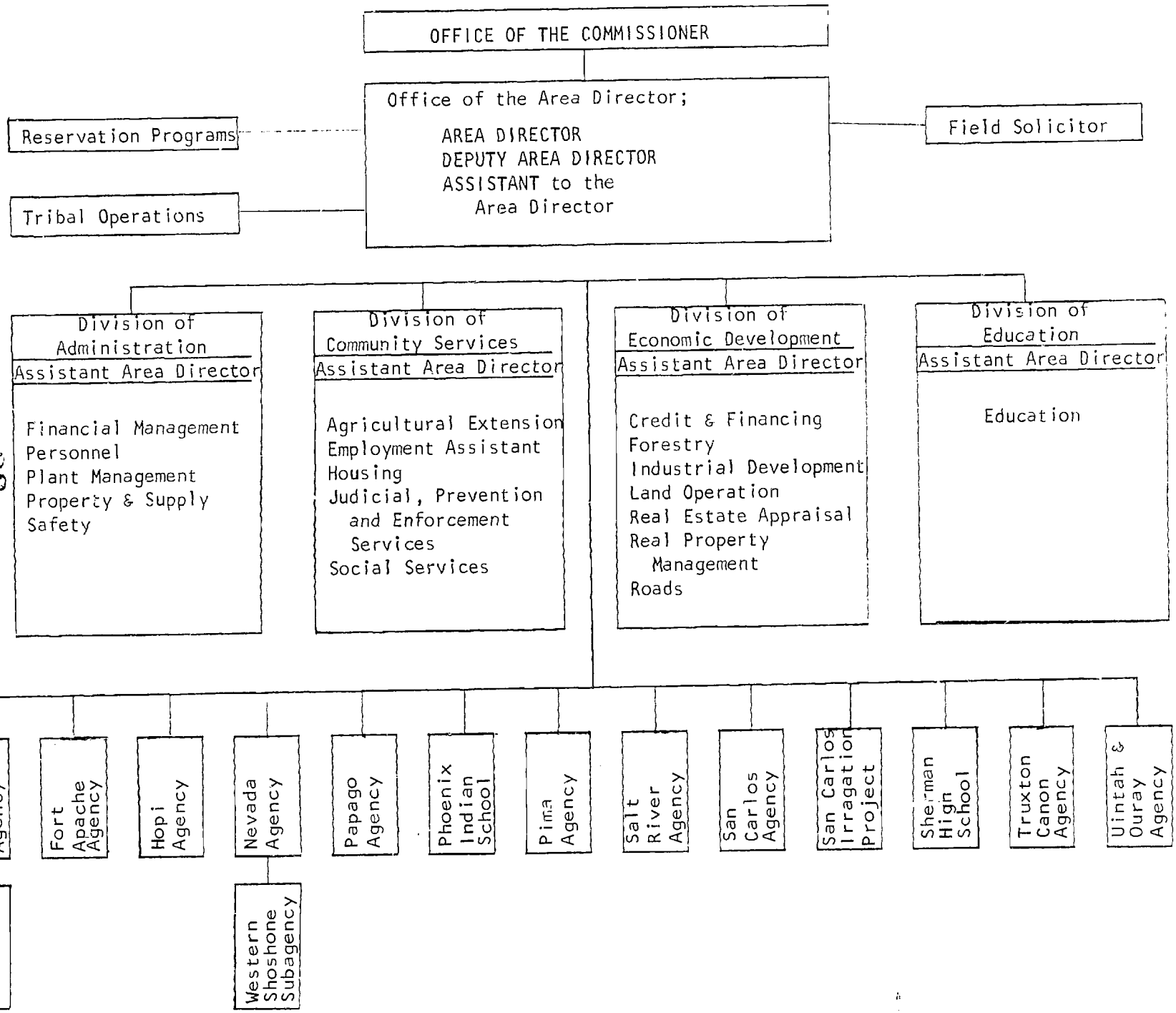
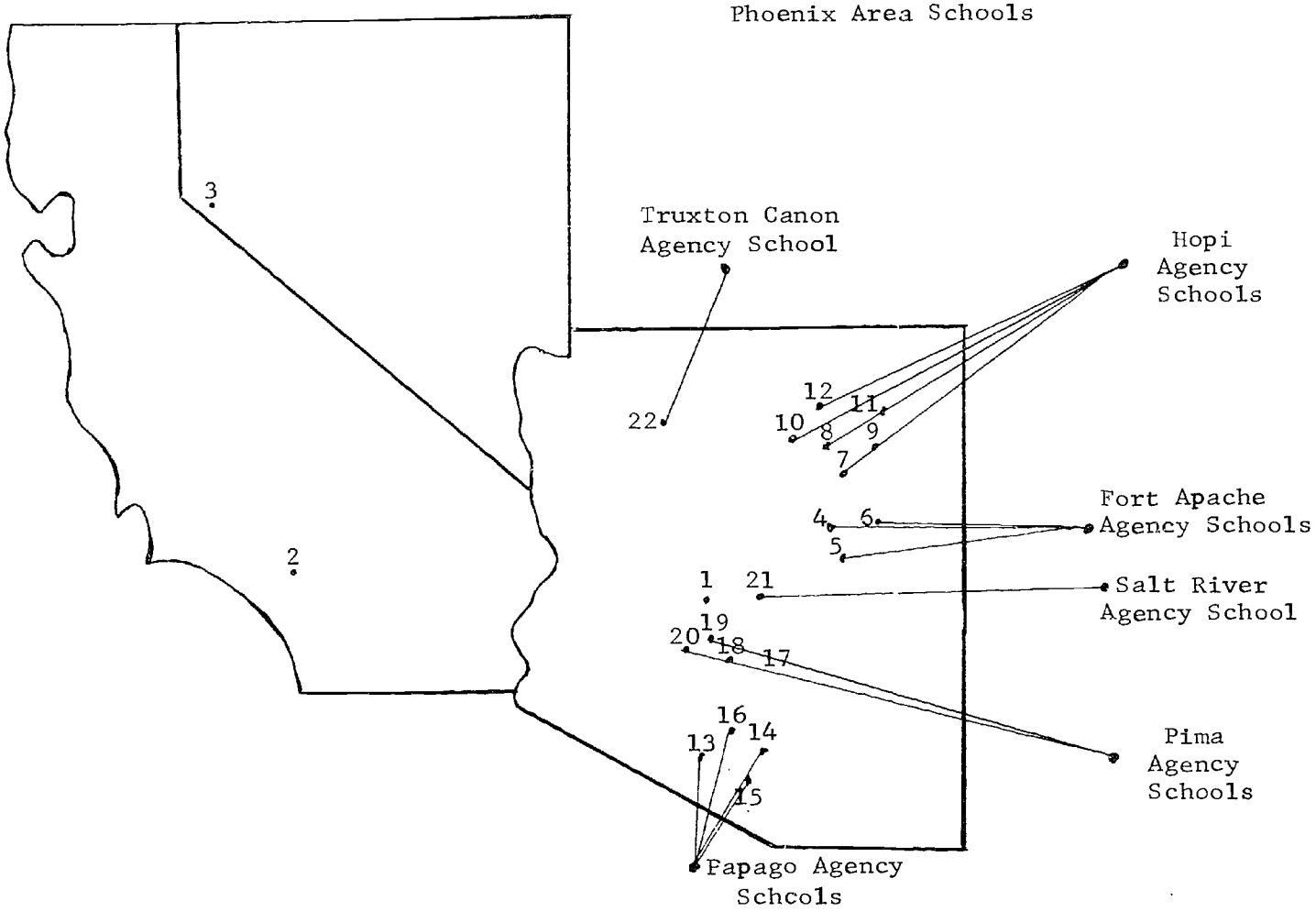


Figure V

Phoenix Area Schools



Legend

1. Phoenix Indian High School
2. Sherman Indian High School
3. Stewart Indian High School
4. Cibecue Day School
5. John F. Kennedy Day School
6. Theodore Roosevelt Boarding School
7. Hopi Day School
8. Hotevilla Day School
9. Keams Canyon Boarding School
10. Moencopi Day School
11. Polacca Day School
12. Second Mesa Day School
13. Kerwo Day School
14. Santa Rosa Boarding School
15. Santa Rosa Ranch Day School
16. Vaya Chin Day School
17. Blackwater Demonstration School
18. Casa Blanca Day School
19. Gila Crossing Day School
20. St. John's Mission School
21. Salt River Day School
22. Supai Day School

School. To the north, approximately 180 miles, are the Hopi mesas and the six schools which serve the Hopi children. A mule trip is necessary to reach the Havasupai village, where the Supai Day School is located near the Grand Canyon. Farther south near the Mexico-Arizona border in the Senoran Desert, is the Santa Rosa Boarding School and three small day schools on the Papago Reservation. Approximately 30 miles south of Phoenix on the Gila River Reservation are the three Pima Bureau Day schools, one small tribal operated school and one mission school. Also, located near metropolitan Phoenix is the Salt River Reservation which contains one day school.

Table 1 lists the number of students in each kind of agency school and indicates that 2,807 attend boarding schools whereas a lesser number, 2,031, attend reservation day schools. Of the six boarding schools, three are off-reservation high schools located in Arizona (Phoenix Indian High School), Nevada (Stewart Indian High School), and California (Sherman Indian High School). The remaining three are elementary boarding schools and are located on the reservations of the White Mountain Apache, Papago, and Hopi Tribes.

Students attending boarding schools do so for a variety of reasons, the most common being that no federal day or public school exists near their homes. Many attend for social reasons which include such things as the absence of home supervision, parents deceased, emotional problems or juvenile delinquency. Frequently they are "push outs" from public schools. Over 60% of the students enrolled in the three off-reservation boarding high schools have spent seven or more years in

Table 1

Enrollment in the Phoenix Area Day and Boarding Schools
in Fiscal 1971 by Agency and School

Agency and School	Grades	Kind of School by Number of Students Enrolled		
		Day	Boarding	School
Fort Apache				609
Cibecue Day School	K-8	279		279
John F. Kennedy Day School	K-5	80		80
Theodore Roosevelt Boarding School	2-8		250	250
Hopi				1,163
Hopi Day School	1-8	175		175
Hotevilla Day School	1-6	95		95
Keams Canyon Boarding/Day School	B-8	48	263	311
Moencopi Day School	1-4	71		71
Polacca Day School	K-6	214		214
Second Mesa Day School	K-6	297		297
Nevada				557
Stewart Indian High School *	8-12		557	557
Papago				497
Kerwo Day School	B-8	47		47
Santa Rosa Boarding School	B-8	191	160	351
Santa Rosa Ranch Day School	B-7	28		28
Vaya Chin Day School	B-4	71		71
Pima				251
Casa Blanca Day School	K-4	119		119
Gila Crossing Day School	K-5	94		94
Blackwater Demonstration School **	K-1	38		38
Phoenix Indian High School *	7-12		940	940

* Off-Reservation School
** Contracted to Blackwater Community

Continued on next page

Table 1 (Continued)

Agency and School	Grade	Kind of School by Number of Students Enrolled		
		Day	Boarding	School
Salt River				188
Salt River Day School	K-6	188		188
Sherman Indian High School *	9-12		637	637
Truxton Canon				24
Supai Day School	B-2	24		24
Total		2,031	2,807	4,876

* Off-Reservation School

public school prior to enrolling in the Bureau schools.

Table 2 shows that the majority of students (2,912) attend elementary schools. A substantially smaller number (1,949) are enrolled in grades 7-12. However, by grade level as seen in Table 3, the upper grades have the largest enrollments. The Area totals for grades eight, eleven, and twelve are over 450 students each, while grades nine and ten are over 500 students each. Most of the middle and lower elementary grades do not number much over three hundred with the smallest total number of students enrolled in kindergarten and first grade.

As shown in Table 4, which gives the enrollment in Phoenix Area agencies and schools by tribes it can be seen that the Hopi Agency schools account for the largest number of students (1,163) while the Havasupai have the smallest number of students enrolled in their agency school.

In all area schools the Hopis represent the largest tribal group, with 1,258 students followed by the Apache, 923; Papago, 840; Navajo, 338; etc. with smaller tribal groups such as the Yakima having as few as two students. In all, more than twenty-two different tribes with rich and varied cultural backgrounds are represented.

In summary, the largest number of students in the Phoenix Area attend boarding schools; the largest concentration of students is in the elementary grades while the largest enrollment by grade level is in the upper grades. Hopis, followed by Apache and Papago Tribes, constitute the largest student enrollment.

Table 2

Enrollment in the Phoenix Area Elementary and High Schools
in Fiscal Year 1971 by Agency and School

Agency and School	Kind of School by Number of Students Enrolled		
	Elementary	High School	Total
Fort Apache			554
Cibecue Day School	279		279
John F. Kennedy Day School	80		80
Theodore Roosevelt Boarding School	195		195
Hopi			1,157
Hopi Day School	175		175
Hotevilla Day School	95		95
Keams Canyon Boarding School	257		257
Keams Canyon Day School	48		48
Moencopi Day School	71		71
Polacca Day School	214		214
Second Mesa Day School	297		297
Nevada			557
Stewart Indian High School *	81	476	557
Papago			497
Kerwo Day School	47		47
Santa Rosa Boarding School	351		351
Santa Rosa Ranch Day School	28		28
Vaya Chin Day School	71		71
Phoenix Indian High School *	104	836	940

* Off-Reservation School

Continued on next page

Table 2 (Continued)

Agency and School	Kind of School by Number of Students Enrolled		
	Elementary	High School	Total
Pima			251
Casa Blanca Day School	119		119
Gila Crossing Day School	94		94
Blackwater Demonstration School **	38		38
Salt River			188
Salt River Day School	188		188
Sherman Indian High School *		637	637
Truxton Canon			25
Supai Day School	25		25
Total	2,912	1,949	4,861

* Off-Reservation School
** Contracted to Blackwater Community

Table 3

Enrollment in the Phoenix Area Grade Levels in
Fiscal 1971 by Agency and School

Agency and School	Number of Students Enrolled by Grade Levels														
	K	B	1	2	3	4	5	6	7	8	9	10	11	12	Total
Fort Apache															554
Cibecue Day	34	30	36	36	25	24	33	20	19	22					279
John F. Kennedy	14		18	15	12	8	13								80
Theodore Roosevelt Brdg				2	2	14	21	31	55	70					195
Hopi															157
Hopi Day			12	8	16	7	7	5	61	59					175
Hotevilla Day			11	16	26	16	13	13							95
Keams Canyon Boarding		15	28	27	30	48	37	21	28	23					257
Keams Canyon Day									27	21					48
Moencopi Day			33	10	9	19	23								71
Polacca Day	26		36	22	30	44	30	33							214
Second Mesa Day	22		44	54	67	37		43							297
Nevada															557
Stewart Indian High *										81	133	117	102	124	557
Papago															497
Kerwo Day		7	10	7	6	7	8			2					49
Santa Rosa Boarding		6	27	38	33	37	63	51	55	41					351
Santa Rosa Ranch Day		1	6	3	3	3	3	4	5	1					28
Vaya Chin		13	11	22	14	11									71
Phoenix Indian High *									23	81	206	217	209	204	940

* Off-Reservation School

Continued on next page

Table 3 (Continued)

Agency and School	Number of Students Enrolled by Grade Levels														
	K	B	1	2	3	4	5	6	7	8	9	10	11	12	Total
Pima															
Cas[illegible] Day	19		25	24	24	27									
Gil[illegible]ssing Day	19		19	19	15	8	14								94
Blackwater **	22		16												38
															188
Salt River															
Salt River Day	42		30	36	21	31	19	8							188
Sherman Indian High *											170	177	166	124	637
Truxton Canon															
Supai Day School		13	4	8											
Phoenix Area Totals	199	85	366	346	333	341	284	229	273	456	509	511	477	452	4,861

* Off-Reservation School
** Contracted to Blackwater Community

Table 4

Enrollment in the Phoenix Area Agency and Off-Reservation Schools by Tribe

Tribe	Phoenix Area Agency and Off-Reservation Schools									
	Fort Apache	Hopi	Nevada	Papago	Phoenix Indian School	Pima	Salt River	Sherman Indian School	Truxton Canon	Phoenix Area Totals
Apache	513		111		198			101		923
Chemehuevi					4			7		11
Cocopah			8		8			7		23
Goshute			19					1		20
Havasupai	26		4		22			6	24	82
Hopi	4	916	28		182	4		124		1,258
Hualapai	9		18		33			18		78
Laguna										
Maricopa	5		6		7	8	176	4		206
Mojave	1		11		15			18		45
Navajo	1	225	2		78	4		28		338
Paiute			62		1			16		79
Papago		1	60	497	201			81		840
Pima	45	2	101		113	245		103		599
Quechan					7			9		16
Shoshone	1		29		5			1		36
Ute			24		13			3		40
Washoe			2					3		5
Yavapai	4		3		2		12	7		28
Sacramento Area			54					98		152
Yakima			2							2
Other		19	13		51			2		85
Totals	554	1,163	557	497	940	612	188	637	24	4,838

BACKGROUND OF TITLE I OF THE ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965

C H A P T E R I I

The Elementary and Secondary Education Act (Public Law 89-10, 89th Congress, HR 2362), felt by some authorities to be the most far reaching and significant education legislation ever written was passed by the United States Congress on April 11, 1965. The Act was designed to contribute toward meeting one or more of the special educational needs of educationally deprived children in the nation's elementary and secondary schools.

Quoted from the Act itself:

> " 'Educationally deprived children' means those children who have need for special educational assistance in order that their level of educational attainment may be raised to that appropriate for children of their age. The term includes children who are handicapped or whose needs for such special educational assistance result from poverty, neglect, delinquency, or cultural or linguistic isolation from the community at large ..."

Not until November, 1966, was the Bureau of Indian Affairs authorized by Congress to participate in Title I. At that time the Office of Education and the Bureau of Indian Affairs established criteria for the appraisal of BIA grant applications. In accordance with the Title I regulations, the following criteria were specifically established for the Bureau of Indian Affairs:

1. The Title I program will be conducted in schools operated by the Bureau of Indian Affairs in a manner which will provide relatively higher concentrations of services in the areas having high incidence of needs and the least ability and resources to overcome those needs.

2. The applications will specify the most important unmet needs of children which have been determined on the bases of a comprehensive assessment of all children enrolled or eligible for enrollment in Bureau of Indian Affairs schools.

3. The application will demonstrate that its development embodies a comprehensive planning endeavor involving full consideration of the functions and capabilities of Federal, State, and local agencies.

The remainder of the most important regulations applying to all agencies participating in ESEA Title I are summarized below:

4. The priority needs of educationally deprived children were determined in consultation with parents, teachers, private school authorities, students, and all others who have a continuing and genuine interest in the children. The objective of the consultation in establishing the priority needs of educationally deprived children is to develop a carefully documented list of needs for: (1) pre-school children, (2) early elementary children, (3) later elementary and secondary school children, (4) drop-outs, (5) institutionalized children, (6) handicapped children, and (7) non-English speaking children.

5. The Title I program must be designed to extend and reinforce the regular school program. Consideration must be given to the relationship of the Title I program to the regular school program and to the possibility of modifying that program so as to provide a better base for the addition of supplementary compensatory educational services.

6. The Title I program must be concentrated on those children who are most in need of receiving special educational services. The consideration of the relative needs of children at all ages and grade levels is designed to meet a limited number of high priority needs which cannot be met through the regular school program or other programs.

7. The Title I program is based on clearly stated performance objectives and desired outcomes and must show substantial promise in meeting the needs of educationally deprived children.

8. The Title I program must propose projects of sufficient size, scope and quality so as to give reasonable promise of substantial progress toward meeting the needs of educationally deprived children for whom the projects are intended.

9. The ratio of project staff to the number of children to be served must be high enough to provide individualized concentrated services to the educationally deprived students.

10. In-service training must be geared specifically to the requirements of the Title I staff and should be of sufficient size and depth to have an impact on the participants and the Title I program.

11. Educational aides assisting professional staff members must participate together in a coordinated training program closely allied to the tasks they will be performing.

12. The Title I program must provide for the maximum involvement of parents in the initial planning, development, implementation, and evaluation of Title I programs and these parents must be represented on all Title I advisory committees.

13. The Title I program must include adequate plans for the dissemination of information of all project activities to persons who have a continuing and genuine interest in the educationally deprived children.

14. The Title I program must contain a description of the evaluation techniques that are to be used in measuring the student performance objectives.

15. Title I funds must not be used to supplant regular program funds. Title I funds are to be planned and budgeted to assure that they are supplemental to regular program funds.

In summary, Title I expenditures are designated for supporting supplementary, compensatory programs involving children meeting poverty, cultural, and educational deficiency criteria which have as their objective raising educational attainment to a level commensurate with the child's age and ability.

OVERVIEW OF TITLE I IN THE PHOENIX AREA IN FISCAL YEAR 1971

C H A P T E R I I I

Introduction

This chapter will deal with the major problem areas of Title I in the Phoenix Area of the Bureau of Indian Affairs and will include discussions of the strategies employed to alleviate them. It will further outline the administrative mechanism and staffing pattern needed to carry out the strategies. In addition, the types of project components will be categorized and discussed according to cognitive, affective, and psychomotor domains.

Chapter III will also cover the projects as approved expenditures compared to the actual expenditures as of June, 1971. It will also discuss the Title I funded staff, and the students being served by the various components.

Administration Strategy

The rationale for establishing the administration mechanism for Fiscal Year 1971 in the Phoenix Area, Bureau of Indian Affairs was aimed at alleviating special Title I problem areas. In the past, there have been a number of problems in the administration and implementation of Title I funds primarily precipitated by the absence of Area Office

Title I administration to coordinate the combined effort of all local schools. Criticisms regarding the misinterpretations, lack of knowledge regarding the purpose and intent of Title I among local school project operators, and lack of parental and community involvement, etc. were leveled by the U.S. Office of Education, the Washington Central Office of the Bureau of Indian Affairs, AVCO Corporation, school personnel, parents, and students. In retrospect, there has been a lack of understanding, communications, trained personnel, and technical assistance at all levels beginning with the U.S. Office of Education, extending to the Washington Central Office of the Bureau of Indian Affairs the Area Offices, and to schools. Although in some instances, monitoring and auditing visits to local schools were conducted by the Washington Central Office, the feedback to the school was seldom, if ever, given. Problem areas were identified, but corrective action did not ensue. Because of staffing shortages, the Central Office could not help to remediate the problem areas identified in the implementation and operation of Title I programs.

Other enigmas presented themselves in the form of: (1) nebulous component objectives which were not defined in behavioral terms nor measurable by any known means; (2) vague or nonexistent evaluation techniques; (3) lack of objective baseline data for the selection of target students; (4) late project approval and funding resulting in a serious deficit of in-service training prior to project implementation and delayed component staffing; (5) the distance between Washington Central Office and the Phoenix Area Office, (2,000+ miles) as well as

the geographic isolation of many of the area schools limited visitations and communications.

In implementing the administrative strategy in the Phoenix Area, the following personnel were employed: a Federal Programs Administrator and three Title I Specialists to act as monitors, trainers, technicians, evaluators, and coordinators for the Phoenix Area Title I projects. The primary thrust was to provide: (1) assistance to local project operators in upholding legal regulations; (2) technical help in systematizing student assessment techniques; (3) guidelines for effective and proper use of funds; (4) coordination activities for future planning and programming to meet student needs; (5) mobilization of Indian resources and finally, (6) scheduling demonstrations and discussions to be held at area-wide workshops and at the local school level regarding techniques of operation and evaluation of Title I activities.

A serious threat to the success of the above strategy was posed by the fact that all Fiscal Year 1971 projects were written and approved prior to the implementation of the area administration mechanism, and these projects contained many or all of the chronic impediments heretofore mentioned.

These inherent weaknesses, if they were to be resolved, depended upon a coordinated effort among all interested parties. These included: Washington Central Office, Area Office administrators, local school administrators, local staff, and especially students and community people. This involvement led to the theme "Mobilization of Indian Resources."

In August, 1970, an area-wide workshop was conducted to help insure that this year's theme "Mobilization of Indian Resources" would become a reality in Title I in the Phoenix Area. With approximately 100 participants in attendance, 83% were Indian people from respective resource groups. These groups included tribal education committees and school board members, parents, students, etc. To reinforce the August workshop, two subsequent conferences were held. In the November and February conferences with attendance again approximately 100 each, over 70% of the participants were Indian.

During these workshops, intensive training was given to the participants in: (1) the intent of the ESEA Title I legislation; (2) techniques for establishing student needs; (3) evaluation procedures; (4) on-going analysis; (5) financial monitoring; and (6) proposal writing guidelines for Fiscal Year 1972 Projects.

Augmenting the three area-wide training workshops, considerable effort was directed toward training and assistance at the local school level. In most instances each project was visited monthly by one or more of the Title I administrative staff. The purposes of these site visits were many and varied and included: (1) reinforcement of the themes and concepts of the area-wide workshops; (2) assistance and/or administration of testing for selection of target groups; (3) evaluation; (4) need assessment; (5) dissemination of information; (6) monitoring of components; (7) supervision of fiscal accounting; (8) parental and community involvement; (9) student input in project planning

and analysis; (10) initiation of procedures for future project planning; (11) assistance and supervision in instructional methodology; and (12) general Title I information sessions.

The degree of success in the "Mobilization of Indian Resources" and the broadened involvement of interest in Title I projects can be seen in the published mid-term report of FY 1971 projects. A total of 170 Indian adults and 180 Indian students participated in the evaluation process which included an analysis of all area projects. Furthermore, literally hundreds of Indian students and community people had input into the planning of FY 1972 projects.

Approved Budget Compared to Actual Expenditures

As can be seen in Table 5, which gives the comparison between the total approved budget and actual expenditures in Fiscal 1971, $1,424,327 was allocated for Title I projects. Of that amount, $1,424,223 or 99.9% was expended. Thus, only $114 was not spent during FY 1971 in all Phoenix Area projects. A monthly fiscal accounting system was utilized to facilitate the proper and effective expenditure of funds. Of the total amount approved, $1,231,699 was contracted to various Indian tribes and school boards.

During the spring of 1970, projects were submitted to the Washington Central Office for approval. With the exception of the off-reservation boarding high schools and two elementary schools, agency-wide rather than local school projects were submitted. For example, the Hopi Agency submitted one project to serve the six Hopi schools rather

than each school requesting its own. As mentioned earlier in this chapter, the projects were approved before the administrative strategy came into existence. The submission of Agency level projects as compared to local school projects contributed to many problems. First of all, coordination of planning for six schools, in the instance of the Hopi Agency, of necessity excluded the involvement of many of the concerned groups which had a continuing and genuine interest in the children. Additionally, parents, instead of coming to their own school, had to travel to a central location where the planning sessions were conducted. Due to the lack of understanding of Title I on the part of most local school administrators, only a few agency personnel had adequate knowledge to prepare the proposals which further limited optimum involvement of the concerned groups. Agency administrators were cognizant of the problems but no technical assistance was available from any source to help each local school prepare its own proposal.

As noted in Table 6 showing the comparison between the Title I per pupil expenditures in elementary and high schools, the high schools received the largest per pupil expenditure, $296, as compared to $208 for elementary students.

Table 7 represents the concentration of funds expended in the three realms, cognitive, affective, and psychomotor.

Table 5

Comparison Between Total Approved Budget and Actual Expenditures in Fiscal 1971 as of June 30, 1971 in the Phoenix Area by Agency or School

Agency/School in the Phoenix Area	Total Student Enrollment	Total Approved Budget	Actual Expenditures	
			Amount	As Percent of Approved Budget
		$	$	
High Schools				
Phoenix Indian	940	265,967	265,967	100%
Sherman Indian	637	190,312	190,198	99.9%
Stewart Indian	557	165,529	165,529	100%
Elementary Schools				
Fort Apache Agency	609	90,493	90,493	100%
Hopi Agency	1163	193,055	193,055	100%
Papago Agency	497	115,045	115,045	100%
Pima Agency*	251	102,827	102,827	100%
Salt River Day School	188	72,299	72,299	100%
Supai Day School	24	10,000	10,000	100%
Phoenix Area Office	N/A	161,942	161,942	100%
Phoenix Area Art Van	N/A	56,858	56,858	100%
Total	4876	1,424,327	1,424,233	99.9%

* Does not include St. John's Mission which participated in the project.

Table 6

Comparison Between the Title I Per Pupil Expenditures in Elementary and High Schools

Kind of School	Number of Students	Amount Approved	Expenditures
High School	2,134	$631,808	$ 296.00
Elementary Schools	2,742	573,719	208.00
All School Projects	4,876	218,800	N/A

It should facilitate the readers understanding of Table 7 and further discussions contained within this report to be aware of the terms component, cognitive, affective, and psychomotor as they are referred to here. It should be noted that the following definitions are for the purpose of this report only. The writers fully realize the limitations and the generalities associated with these terms, and it is expected that the following definitions would not accurately or adequately denote the literal meaning of these terms used outside the context of this report.

Component - An activity or set of activities designed to meet a specific behavioral objective.

Cognitive - The realm of behavior which relates to the acquisition of knowledge, skills, insights, patterns of orientation, or the application of rationality to problem situations.

Affective - The realm of behavior which relates to feelings, emotions, attitudes, values, personality and their collective impact upon an individual's personal, social, and academic development.

Psychomotor - This domain refers to the general area of neuromuscular development. This would include health, hygiene, and physical education or fitness.

The largest expenditures were in the affective domain, $664,221, while the psychomotor domain received the least, $11,547. The largest category within the affective components was drop-out prevention, $302,617, followed by self-image, $159,779. The category other consisted primarily of funds for Tribal Education Coordinators who were concerned with all categories of the affective domain in general.

Table 7

Phoenix Area Fiscal 1971 Title I Amounts Funded by Kind of Components
by Agency or School

Agency / School	Phoenix Area FY 1971 Title I Amounts Funded by Components									
	Cognitive			Affective				Psycho-motor	Other	Total
	Reading Lab	Reading Tutoring	Bilingual Aides	Self Image	Dropout Preventi	Voc. Awareness	Other	Physical Fitness	Misc/Adm/ Coord'tion	
High Schools										
Phoenix Indian	30,802			141,614	77,843		10,556		5,152	265,967
Sherman Indian	29,500				135,200		20,612		5,000	190,312
Stewart Indian	80,820				50,000	27,691			7,018	165,529
Elementary Schools										
Ft Apache Agency		16,650	25,770		13,535		28,438		6,100	90,493
Hopi Agency	7,955		137,237		26,039		21,824			193,055
Papago Agency	30,977		49,432				34,636			115,045
Pima Agency		44,579	37,028				20,727		500	102,827
Salt River Day Sch			5,773	18,165			17,341	11,547	19,473	72,299
Supai Day School			10,000							10,000
Phoenix Area Office									161,942	161,942
Phoenix Area Art Van									56,858	56,858
Total	180,054	61,222	265,240	159,779	302,617	27,691	154,134	11,547	262,043	1,424,327
Component Total	$506,516			$644,221				$11,547	$262,043	$1,424,327

The cognitive area was geared to increase reading/communication skills and overall academic achievement. The funding of bilingual classroom aides, $265,240, was the largest category, followed by reading laboratories, $180,054, and tutoring, $61,222. All cognitive funding at the high schools was for reading laboratories. In contrast, the elementary schools focused on the placement of bilingual aides in the classroom.

Chapters IV-VIII will further report the success or lack of success of the components objectives by realms or domain and their respective categories of expenditures and subsequent changes for Fiscal 1972 projects.

Staff Positions Funded Through Title I

Table 8 represents the number of professional and paraprofessional positions funded by Title I. This table does not show the regular program staff which in many cases offered more extensive services to target students than did the Title I employees. 99.8 percent of all project staff approved in the proposals were hired as of September, 1970.

As seen in the table, there were more than three times as many paraprofessionals hired, 114, than professionals, 35. This was largely due to the stress put on the hiring of bilingual classroom aides.

The cognitive components funded a total of 77 positions, followed by 57 positions in the affective components.

Hopi Agency projects funded the most positions, 37, followed by Phoenix Indian, 27. Supai Day School project funded the fewest, 2.

Table 8

Number of Professional and Paraprofessional Staff Positions Funded by Title I in Fiscal 1971 by Kind of Component, by Agency or School

Agency/School	Components by Number of Staff Positions																				
	Cognitive						Affective								Psycho-Motor		Other		Totals		
	Reading Lab		Reading Tutoring		Bilingual Aides		Self Image		Dropout Prevention		Voc. Awareness		Other		Physical Fitness		Misc/Clerical/Admin Coordtion				
	P	Pp	P	Pp	P	Pp	P	Pp	P	Pp	P	Pp	P	Pp	P	Pp	P	Pp	P	Pp	All
High Schools																					
Phoenix Indian	2	3					3	11	3	3			1					1	9	18	27
Sherman Indian									1	10				2				1	1	13	14
Stewart Indian	3	4							3		1	1						1	7	6	13
Elementary Schools																					
Ft Apache Agency			1			7				1			1	1				1	2	10	12
Hopi Agency		1				29				5			1	1					1	36	37
Papago Agency	1					12							1	1					2	13	15
Pima Agency			3	3	1	4							1	1					5	8	13
Salt River Day School						1	2						1	1		2		1	3	5	8
Supai Day School						2														2	2
Phoenix Area Art Van																	1	1		1	2
Total	6	8	4	3	1	55	5	11	7	19	1	1	6	7		2	1	7	35	114	149
Component Total	77						57								2		8				

*P = Professional **Pp = Paraprofessional

As can be seen in Table 9 there was a total of 114 paraprofessionals funded compared to 35 professionals.

Cognitive components funded the most staff, 77, followed by 57 staff members in the affective and 2 in the psychomotor domain components.

Even though the cognitive domain components had a higher total of Title I funded staff, 77, than did the affective domain, 57, there were 8 more professional staff members funded in the affective domain than in the cognitive.

Student Participation in Title I Projects

Table 10 represents the number of students participating by school and component domain. The cognitive components served a total of 2,177 students, closely followed by affective components which served 2,059.

In the cognitive components, bilingual aides served nearly three times the number of students, 1,583, as did the laboratories and tutoring combined.

The largest concentration of target students, 1,307, in the affective components participated in drop-out/attendance activities, whereas the fewest were served by vocational awareness. It was impossible to determine exactly how many students were served by the five Tribal Education Coordinators, thus not applicable (N/A) appears under the category labeled Other.

Table 9

Comparison Between the Number of Professional and Paraprofessional Staff Positions Funded by Title I in Fiscal 1971

Components by Number of Staff Positions								Total	
Cognitive		Affective		Psychomotor		Other			
Profes.	Paraprofes.	Profes.	Paraprofes.	Profes.	Paraprofes.	Profes.	Paraprofes	Profes.	Paraprofes.
11	66	19	38	-	2	5	8	35	114
77		57		2		2		147	

Table 10

Number of Students Participating in Title I Projects in Fiscal 1971 by Component by Agency or School

Agency or School	Number of Students Participating by Component								
	Cognitive			Affective				Psycho-motor	Other
	Reading Lab	Reading Tutoring	Bilingual Aides	Self Image	Dropout Prevent'n	Voc Awareness	Other	Physical Fitness	Misc/Adm. Coord'tion
High Schools									
Phoenix Indian	185			310	482		82		
Sherman Indian	76				450		232		
Stewart Indian	61				60	40			
Elementary Schools									
Ft Apache Agency		91	189		235		N/A		
Hopi Agency	40		900		80		N/A		
Papago Agency	53		315				N/A		
Pima Agency		88	77				N/A		
Salt River Day School			78	88			N/A	133	100
Supai Day School			24						
Total	415	179	1,583	398	1,307	40	314	133	100
Component Total	2,177			2,059				133	100

COGNITIVE DOMAIN PROJECTS

C H A P T E R I V

Introduction

Broadly defined, the cognitive domain refers to that aspect of learning which relates to the acquisition of knowledge, skills, insights, patterns of orientation or the application of rationality to problem situations. A major Title I effort within the Phoenix Area's schools for this year lay in the cognitive domain. Specifically, many Indian people and school personnel chose to address the problem of low reading and communication skills development among the Indian youngsters. It seemed obvious that if the often quoted goal of providing the Indian people the best of both their culture and the dominant culture was to be reached, then opportunities for the development of reading and communication skills in English had to be an integral part of any realistic program. Consensus was realized and action became the concern. As a result, numerous projects which had as their objectives improved reading and/or communication skills evolved. The methods selected for reaching stated goals varied and included special purpose instrumentation, teaching techniques and materials (soft ware) and specialized personnel. An analysis of project procedures allows us to categorize these into major groupings and activities, to assign expenditures to each, and to evaluate them categorically.

All cognitive domain projects or components in this area dealt with reading and/or communication skills development and fell into three large categories differentiated by the major activity being utilized. These included:

1. Reading Laboratories - Special purpose instrumentation, multi-media methodology, and materials geared to individual interest and efficiency levels are used in a skill/concept oriented setting divergent from the traditional classroom approaches. These laboratories allow for truly individualized instruction which is self-pacing and individually prescribed remediation contingent upon each student's diagnosed need.

2. Reading - Tutoring - Reading/language specialists, individualized instruction, reduced class size, tutors, etc., are utilized largely to teach remedial reading.

3. Bilingual Aides - Indian aides are used to translate concepts, tutor, and individualize instruction within the regular classroom setting.

These activities are listed by comparative expenditures in Table 11. The largest expenditure went into the programs directed toward improving overall reading communication skills through the usage of bilingual aides. This aspect of the efforts to remediate reading/communication deficiencies received a total of $265,240. Next in line were those projects which had as their core a reading laboratory;

Table 11

Amount Funded in Title I Projects in Fiscal 1971 Cognitive Domain Projects by Agency and School

Agency or School	Cognitive Domain Projects			Total
	Reading Laboratory	Reading Tutoring	Bilingual Aides	
High Schools				
Phoenix Indian	30,802			30,802
Sherman Indian	29,500			29,500
Stewart Indian	80,820			80,820
Elementary Schools				
Ft pache Agency		16,650	25,770	42,420
Hopi Agency	7,955		137,237	145,192
Papago Agency	30,977		49,432	80,409
Pima Agency		44,572	37,028	81,600
Salt River Day Sch			5,773	5,773
Supai Day School			10,000	10,000
Phoenix Area Totals	180,054	61,222	265,240	506,516

expenditures of $180,054 are reflected there. The smallest amount of monies, $61,222 went toward the establishment of tutorial reading systems. The table shows that all agencies within the Phoenix Area had at least one Title I activity designed to upgrade the reading/communication skills of Indian children.

Table 12 indicates the number of Title I funded professionals and paraprofessionals who took part in the reading/communication projects. Sixty-six individuals functioned in various paraprofessional roles and in most all instances were bilingual. Eleven people fulfilled professional positions, generally as reading specialists in a laboratory, or functioned as specialists who provided tutorial services. The table shows the actual number of people salaried by Title I at each school.

Table 13 provides the actual numbers of pupils by school who took part in the various reading/communication skill programs. As may be seen from this table, 2,177 youngsters participated in a series of experiences all of which were designed to augment their reading/communication skills. This figure indicates that nearly half of the Indian children in the Phoenix Area's jurisdiction took part. Further inspection of the table reveals that the majority of students were at the elementary level and received supplementary services from the bilingual aide programs. 41 high school and elementary school students were in reading laboratories and 179 elementary students were tutored by a reading specialist.

Table 12

Number of Professional and Paraprofessional Staff Positions Funded by Title I in Fiscal 1971 in Cognitive Domain Projects by Agency or Schools

Agency or School	Cognitive Domain Projects						Total	
	Reading Laboratory		Reading Tutoring		Bilingual Aides			
	Prof*	Para*	Prof	Para	Prof	Para	Prof	Para
High Schools								
Phoenix Indian	2	3					2	3
Sherman Indian								
Stewart Indian	3	4					3	4
Elementary Schools								
Ft Apache Agency			1			7	1	7
Hopi Agency		1				29		30
Papago Agency	1					12	1	12
Pima Agency			3	3	1	4	4	7
Salt River Day School						1		1
Supai Day School						2		2
Total	6	8	4	3	1	55	11	66

* Prof. = Professional

** Para. = Paraprofes onal

Table 13

Number of Students Participating in Title I Projects in Fiscal 1971 in Cognitive Domain Projects by Agency or School

Agency or Schools	Cognitive Domain Projects			Total
	Reading Laboratory	Reading Tutoring	Bilingual Aides	
High Schools				
Phoenix Indian	185			185
Sherman Indian	76			76
Stewart Indian	61			61
Elementary Schools				
Fort Apache Agency		91	189	280
Hopi Agency	40		900	940
Papago Agency	53		315	368
Pima Agency		88	77	165
Salt River Day School			78	78
Supai Day School			24	24
Total	415	179	1,583	2,177

A more detailed presentation of the evaluative data and a short discussion of individual project results are presented in this chapter in the following order: I. Reading Laboratories; II Reading Tutoring; and III Bilingual Aides.

I

READING LABORATORIES

HIGH SCHOOLS

Phoenix Indian

Sherman Indian

Stewart Indian

ELEMENTARY SCHOOLS

Hopi Agency - Polacca Day

Papago Agency - Santa Rosa Boarding

P H O E N I X I N D I A N H I G H S C H O O L

READING LABORATORY

I. Vital Statistics

A. School Name and Address: Phoenix Indian High School
P.O. Box 7188
Phoenix, Arizona 85011

B. Component Cost: $30,802

C. Staffing Pattern: Professional - Two reading teachers
Paraprofessional - Three teacher aides

D. Number of Students Participating:

185 ninth grade students

E. Component Operator: Blanche V. Johnson

II. Component Objectives

To raise the reading/communication skills level of 185 ninth grade students by 1.0 or more years as measured by Gates MacGinnitie Reading Test.

III. Evaluation

Pre-Post Gates MacGinnitie Reading Test data was collected at the beginning and end of four nine-week cycles.

IV. Procedures

The 185 ninth grade students were divided into four groups of approximately 47 students each. Each group spent one hour daily for a nine-week period in the laboratories which were under the direction of two reading teachers and three teacher aides. Special methodology involved individualized instruction in multi-media

methods, high interest-low readability materials, and individualized tutoring. While in the media laboratory, students utilized programmed materials and an instant replay television system. Also daily exercises in dictating and rescribing were conducted in the oral and written communication laboratory. Ninth grade students reading four or more years below grade level were selected for this program.

V. Results

Table 14

Comparison Between Pre and Post Test Mean Scores on the Gates Mac Ginnitie Reading Test Administered at the Beginning and End of Nine Week Periods for the First, Second, Third, and Fourth Quarterly Groups

Group	Number of Students Tested	Gates MacGinnitie Reading Test Period		
		Pre Mean Scores	Post Mean Scores	Amount of Gain or Loss (+ -)
First Quarter (Sept. - Nov.)	34	5.01	6.07	+ 1.06
Second Quarter (Nov. - Dec.)	42	5.00	6.03	+ 1.03
Third Quarter (Jan. - Mar.)	55	5.37	6.50	+ 1.13
Fourth Quarter (Mar. - May)	54	4.66	5.69	+ 1.03
Totals	185	5.01	6.07	+ 1.06

VI. Discussion of Results

The analysis of data obtained from this project indicates that target students as shown in Table 14 gained an average of 1.06 years during their nine week exposure. The largest gain for an individual cycle occurred in the third quarter with the gain being 1.13 years. The smallest increase, 1.03 years took place in the second quarter. Analysis of individual nine-week cycles showed that students who were frequently absent gained far less than those who attended class regularly. Having met the stated objective of the project, it would appear that reading instruction utilizing individualized procedures and multi-media techniques shows considerable promise. It should be noted that the gains registered are for short nine week periods. Longitudinal studies would show if the increases carry over into the remaining year.

S H E R M A N I N D I A N H I G H S C H O O L

READING LABORATORY

I. Vital Statistics

A. School Name and Address:	Sherman Indian High School 9010 Magnolia Riverside, California 92503
B. Component Cost:	$29,500
C. Staffing Pattern:	Professional - One full-time regular program classroom teacher
D. Number of Students Participating:	58 full year; 18 half year
E. Component Operator:	Ruby Lee Shepherd

II. Component Objectives

To raise the reading scores of 58 ninth grade students by 2.0 years as measured by the California Achievement Test - Total Reading Section.

III. Evaluation

September Pre, January Mid, and May Post California Achievement Reading Test - Total Reading Section.

IV. Procedures

A reading laboratory was established under the direction of one regular program classroom teacher. The teacher received special training in various rationales and procedures as they apply to an individualized remedial program. Special methodology included a multi-modal, self-pacing, auto-instructional, special purpose machine oriented program. Each student spent approximately one

hour daily in the laboratory. Target students were selected as those 58 most deficient in reading skills in the ninth grade.

V. Results

Table 15

Comparison Between Pre, Mid, and Post Test Mean Scores on the California Achievement Test - Total Reading Scores Administered in September, January, and May for Students Participating in the Project For a Full Year and a Half Year by Grade Level

Test Period	California Reading Test			
	Full Year		Half Year	
	Number of Students	Mean Score	Number of Students	Mean Score
September Pre-Test	58	4.5	--	--
January Mid-Test	58	5.5	18	5.9
May Post-Test	19*	7.3	18	7.3
Amount Gain or Loss (+ or -)		+ 2.8		+ 1.

* Randomly Selected for Testing

IV. Discussion of Results

Inspection of the data in Table 15 reveals a progressive rate of improvement for subjects who were involved for the entire school year. The mid-year net gain was 1.0 years while the second half showed a net increase of 1.8 years for a total gain of 2.8 years. Students who took part for one-half year gained 1.4 years. This

difference in growth rate may be attributable to the fact that the laboratory was not fully operational until almost the middle of the first semester. Obviously the objective was met and even exceeded, suggesting that the utilization of varied instructional techniques supplemented by instrumentation designed to develop reading skills warrants further attention in remediating reading deficiencies.

S T E W A R T I N D I A N H I G H S C H O O L

READING LABORATORY

I. Vital Statistics

A. School Name and Address: Stewart Indian High School
Nevada Indian Agency
Stewart, Nevada 89437

B. Component Cost: $80,820

C. Staffing Pattern: Professional - One Title I reading specialist and two Title I reading teachers

D. Number of Students Participating: 61

E. Component Operator: Leslie Kwoen

II. Component Objectives

Sixty-one pre-high and ninth grade students demonstrating a lack of reading skills and reading two to three years below their grade level will increase scores on California Achievement Test, Wide Range Achievement Test, and EDL Biometrics Eye-Grapher one year over a nine-month period. (Note: Progress during a normal school year has been less than three months)

III. Evaluation

A. October Pre, May Post California Achievement Test - Reading and Total Test Battery Sections.

B. November Pre, December Mid, and May Post Wide Range Achievement Test - Reading Section.

C. November Pre, December Mid, and May Post Biometrics Eye-Grapher.

IV. Procedures

The overall program offered continuous instruction and involvement in reading and communication skills to the 61 project students on a daily basis. This program supplemented regular classes in reading and English Composition for the pre-high school project students. For these students at least two hours per day, two days a week were spent in the reading center. The high school students participated five hours per week in addition to their regular English classes on a scheduled basis where they received instruction for identified reading and communication difficulties.

Special methodology included the use of controlled readers, tachistoscopic techniques, specialized films, tapes, and numerous innovative teacher-made materials.

V. Results

(See Chart on next page)

Table 16

Comparison Between Pre and Post Test Mean Scores on the California Achievement Test - Total Reading Section and Total Test Battery Administered in October, and May, 1971 to Pre-High and High School Students

Test Periods	No. of Students Tested in Pre-High & High	California Achievement Test Reading Section and Total Test Battery by Pre-High and High					
		Reading Section			Total Battery Section		
		Pre High	High	Total Mean	Pre High	High	Total Mean
October Pre-Test Mean Scores	61	4.5	5.4	5.1	4.6	5.1	4.9
May Post-Test Mean Scores	59	6.4	7.8	7.2	6.0	7.6	6.8
Total Gain or Loss (+ or -)		+1.9	+2.4	+2.1	+1.4	+2.5	+1.9

VI. Discussion of Results

The figures in Table 16 represent the pre and post mean scores on the Reading Section and the Total Battery Section of the California Achievement Test. It can be seen that the high school students' gain of 2.4 years exceeded the 1.9 years increase for pre-high school pupils on the Reading Section criteria. The same relationship for the increase exists on the Total Battery Section. There, the high school group gained 2.5 years while the pre-high group moved 1.4 years. The comparison of increases for high school students on the two scales reflect general improvement in reading, vocabulary development, word attack skills and comprehension. The lower but still significant gains made by pre-high students suggests

basic improvement of reading skills with a lesser degree of success in transposing them to vocabulary and overall comprehension.

Table 17

Comparison Between Pre, Mid, and Post Mean Scores on the Wide Range Achievement Test - Reading Section Administered in November, December, and May, 1971 to Pre-High and High School Students

Test Period	Number of Students Tested	Wide Range Achievement Test - Reading Section by Pre-High and High School		
		Pre-High	High	Composite Mean
October Pre-Test Mean Scores	61	4.8	3.3	4.0
January Mid-Test Mean Scores	61	5.1	4.5	4.8
May Post-Test Mean Scores	59	6.4	6.0	6.1
Amount of Gain or Loss (+ or -)		+1.6	+2.7	+2.1

Table 17 shows the results of Pre-Mid-Post data for the Pre-High and High School students on the Wide Range Achievement Test. The scores are reported as group means. The largest gain occurred for the high school group, which increased 2.7 years. A smaller but substantial gain of 1.6 years was shown for the pre-high school students. It may be noted that by comparison the pre-high group has higher mean values on the Pre-Mid-Post tests than does the high school section.

Table 18

Comparison Between Pre, Mid, and Post Test Mean Scores on the Biometrics Eye-Graph Administered in October, January, and May 1971 to Pre-High and High School Students

Test Period	No. of Students Tested	Biometric Eye-Graph		
		Pre High	High	Total Mean Score
October Pre-Test Mean Score	61	4.7	8.2	6.5
January Mid-Test Mean Score	61	8.6	11.9	10.3
May Post-Test Mean Score	61	10.4	12.9	11.8
Amount of Gain or Loss (+ or -)		+ 5.7	+ 4.7	+ 5.3

The Biometrics Eye-Graph instrument allows an evaluator to photograph and record the various eye movements that occur during the act of reading, e.g., fixations, regressions, left-right motility and return sweep. This information can be extremely useful in planning individual activities aimed toward the improvement of specific difficulties. The raw data obtained may also be converted into grade level placement. These mean scores are reported in Table 18. It can be seen that the pre-high group made the higher gain, 5.7 years. The high school population improved a total of 4.7 years. When used as a supplementary diagnostic method in conjunction with other standardized tests, the Biometrics Eye-Graph appears to have considerable merit.

Table 19

Comparison Between Pre and Post Test Mean Scores on The Wide Range Achievement Test - Vocabulary Section Administered in November and May, 1971 by Quartiles

Test Periods	Wide Range Achievement Test - Vocabulary Section							
	Quartile* 1		Quartile 2		Quartile 3		Quartile 4	
	N**	Mean Score	N	Mean Score	N	Mean Score	N	Mean Score
November Pre-Test	15	2.10	15	3.73	15	4.03	16	6.70
May Post-Test	15	3.58	15	6.08	15	6.99	14	7.78
Amount of Gain or Loss (+ or -)		+1.48		2.86		2.98		1.51

* Q_1 = lowest quarter of target students
Q_2 = second lowest quarter of target students
Q_3 = second highest quarter of target students
Q_4 = highest quarter of target students

** N = number of students

The Wide Range Achievement Test - Vocabulary Section scores were compiled by quartile with Quartile 1 being the lowest and Quartile 4 being the highest in Table 19. This was done to see what dynamics, if any, were operative within the ability ranges as identified by the quartile rankings. The analysis reveals that the first quartile and fourth quartile mean gains were nearly equal with 1.48 and 1.51 years as respective values. The second and third quartile increases were approximately the same, 2.86 and 2.98 years but substantially higher than the first and fourth quartiles. Causal factors for this variation in gain rates remain unknown at this time.

Table 20

Comparison Between Pre and Post Test Mean Scores on the California Achievement Test - Total Reading Section Administered in October and May 1971 by Quartiles

Test Periods	California Achievement Test-Reading Subscores by Quartiles							
	Quartile* 1		Quartile 2		Quartile 3		Quartile 4	
	N**	Mean Score	N	Mean Score	N	Mean Score	N	Mean Score
October Pre-Test	15	3.67	15	4.70	15	5.40	16	6.47
May Post-Test	15	6.60	15	6.82	15	7.15	14	8.06
Amount of Gain or Loss (+ -)		+2.93		+2.12		+1.75		+1.59

* Q_1 = lowest quarter of target students
Q_2 = second lowest quarter of target students
Q_3 = second highest quarter of target students
Q_4 = highest quarter of target students

** N = number of students tested

California Achievement Test - Reading subscores were computed for both pre-high and high school target groups and plotted by mean values in quartile ranges in Table 20. Inspection of this data shows that the rate of progress increased sequentially relative to lower ability as indicated by the quartile ranges. That is, students with the lowest ability, first quartile, progressed more than those in the second quartile. This pattern was evident across the four quartiles. Specifically, it was observed that those in the first quartile gained 2.93 years; those in the second quartile increased 2.12 years; students in the third quartile improved 1.75 years;

and a total of 1.59 years gain was reported for pupils in the fourth or highest quartile. It is plausible then to suggest that students who are most deficient in reading skills stand to improve more than those who are only slightly behind their peer groups. Since the intent of Title I is to deal with the most deficient, the application of this observable trend to Title I projects is appropriate.

P O L A C C A D A Y S C H O O L

Hopi Agency

READING LABORATORY

I. Vital Statistics

A. School Name and Address:	Polacca Day School Polacca, Arizona 86042
B. Component Cost:	$7,955
C. Staffing Pattern:	Professional - One full-time regular program classroom teacher Paraprofessional - One full-time Title I aide
D. Number of Students Participating:	40
E. Component Operator:	John Archer

II. Component Objectives

To raise the reading scores of 40 students in grades 4-6 to national norms as measured by the California Achievement Test - Total Reading Section.

III. Evaluation

Pre-Post California Achievement Test

IV. Procedures

The target group of 40 children spent approximately 5 hours weekly for 18 weeks in the reading laboratory which was under the direction of a full-time regular program teacher who was assisted by a bilingual Title I aide. Special methodology consisted of a self-pacing, individualized program utilizing special purpose instrumentation such as controlled readers, tachistoscopic techniques and listening devices.

V. Results

Because of the delay in receiving equipment, supplies and materials, the reading laboratory did not become operable until the beginning of the second semester. No conclusions can be drawn as to the degree that the laboratory activities remediated student needs at this time.

S A N T A R O S A B O A R D I N G S C H O O L

Papago Agency

READING LABORATORY

I. Vital Statistics

A. School Name and Address: Santa Rosa Boarding School
Sells, Arizona 85634

B. Component Cost: $8,913

C. Staffing Pattern: Professional - One full-time Title I Reading Teacher

D. Number of Students Participating: 53

E. Component Operator: Evelyn Barrett

II. Component Objectives

To raise the reading level of 53 students (grades 4-8) 1.0 years as measured by the Botel Reading Inventory.

III. Evaluation

October Pre, May Post Botel Reading Inventory

IV. Procedures

In October, all children in grades 4-8 were pre-tested with the Botel Reading Inventory. Fifty-three of these students were reading three or more years below grade level and were selected as the target group.

Fourteen instructional groups were scheduled. Four groups of children in grades 4 and 5 from self-contained classrooms met daily for half an hour. Ten groups from grades 6 through 8 met

either 2 or 3 times per week for 45 minute periods with numbers in each instructional group ranging from 2 to 8 pupils. Materials and instruments were varied and included: Language Master tapes, Tapes Unlimited, S.R.A. tape recorder, specific skill builder work books, programmed learning, group and individual reading lessons in texts of high interest and low vocabulary level, film strips, slides, controlled readers, after school reading parties, and overnight book loans from the recreational book shelves for home consumption.

V. Results

Table 21

Comparison Between Pre and Post Test Mean Scores on the Botel Reading Inventory (Form A) Administered in October 1970 and May 1971 to Students Participating in the Project by Grade Level

Test Periods	Botel Reading Inventory (Form A) Scores by Grade L									
	4th		5th		6th		7th		8th	
	N*	Mean	N	Mean	N	Mean	N	Mean	N	Mean
October Pre Test	9	1.2	14	1.9	11	2.5	9	3.0	10	4.0
May Post-Test	8	2.1	14	3.7	11	3.8	9	5.0	9	5.7
Amount of Gain or Loss (+ -)		+0.9		+1.8		+1.3		+2.0		+1.7

* N = Number of Students Tested

VI. Discussion of Results

As shown in Table 21, the group showing the largest gain was the seventh grade with an increase of 2.0 years while the fourth grade made the least gain, 0.9 years. Overall, the total average gains appear substantial as measured by the Botel Reading Inventory with all groups meeting the stated project objectives except for the fourth grade group. However, the utilization of additional instruments in this evaluation would have provided a more comprehensive picture of the results.

II

READING TUTORING

HIGH SCHOOLS

None

ELEMENTARY SCHOOLS

Fort Apache Agency

Pima Agency

F O R T A P A C H E A G E N C Y S C H O O L S

READING TUTORING

I. Vital Statistics

A. School Name and Address: Fort Apache Agency Schools
Whiteriver, Arizona 85941

B. Component Cost: $16,650

C. Staffing Pattern: Professional - One full-time Title I reading teacher

D. Number of Students Participating: 91

E. Component Operator: James H. Powell

II. Component Objectives

To raise the reading level of 91 students in grades 1-8 at Cibecue and John F. Kennedy Day schools by 1.5 years as measured by California Achievement Test - Total Reading Section.

III. Evaluation

September Pre, May Post California Achievement Test - Total Reading Section.

IV. Procedures

A total of 91 children, 41 at John F. Kennedy (21 first, 8 third, 7 fourth, and 7 fifth graders) and 50 at Cibecue (8 first, 8 second, 4 third, 8 fourth, 8 fifth, 5 sixth, 4 seventh, and 5 eighth graders) participated in the program. These students were selected on the basis of standardized test data and teacher referrals. The children received approximately two hours of remedial tutoring per week.

This tutoring was aimed at remediating their specific weaknesses in reading as determined by the reading teacher and the children's classroom teachers.

V. Results

Table 22

Comparison Between Pre and Post Test Mean Scores on the California Achievement Test - Total Reading Section Administered in September and May, 1971 to Students Participating in the Title I Project and a Control Group not Participating in the Title I Project in Grades 1-5 at John F. Kennedy Day School

Test Periods	California Achievement Test-Total Reading Mean Scores by Grade Level for Title I and Control Group									
	1st		2nd		3rd		4th		5th	
	T_1 N=12[3]	C_2 N=18	T N=8	C_2 N=15	T N=7	C N=11	T N=7	C N=7	T N=7	C N=13
September Pre-Test Mean	.9	.9	1.3	1.6	2.7	2.7	2.7	2.7	3.7	3.8
May Post-Test Mean	1.2	1.2	1.7	1.9	2.8	3.0	4.7	4.7	4.2	4.9
Amount Gain or Loss (+ or -)	+ .3	+ .3	+ .4	+ .3	+ .1	+ .3	+2.0	+2.0	+ .5	+1.1

[1] T = Title I Group

[2] C = These two control groups received the services of Title I teacher aides. See Fort Apache "Overall Communication Skills Project and Table 25.

[3] N = Number of Students Tested

VI. Discussion of Results

Table 22 reports the mean scores by grade level compared to equivalent control groups as obtained from California Achievement Test - Total Reading Section data among grades one through five at the

John F. Kennedy Day School. Only one class, the 2nd grade, showed an improvement over the control group which did not receive the tutoring services of the reading specialist. The gain was minimal at .4 years while the control group increased .3 years. The first grade sections gained the same amount at .3 years. In the third grade the control group improved more, although slightly, with a value of .3 while the Title I section only improved .1 years. The more pronounced growth was seen in the fourth and fifth grades. However, the fourth grade control group improved at an equal rate, 2.0 years, as did the section with supplementary tutoring. The fifth grade population showed an interesting picture also. While both target and control groups evidenced improvement, the control section with a 1.1 year increase exceeded the .5 years shown by the class with the specialist. It should be noted that Apache children show English language deficiencies which are more severe than most tribal groups served by the Phoenix Area Office. Nevertheless, the minimal gains reflected in the analysis for target students, and in some cases the fact that control groups, those without the specialized tutoring, exceeded the growth observed in Title I classes, raise some questions about the success of this project. Additionally, this program was designed to utilize one specialist between two schools; in this case the distance was over thirty miles. By splitting the time between two schools, it is possible that maximum concentration of effort was lowered. Another factor could be the size of target groups. For example, at John F. Kennedy, 41 were involved and fifty were included at the second school, Cibecue Day School. Its evaluation is included in Table 23.

Table 23

Comparison Between Pre and Post Test Mean Scores on the California Achievement Test - Total Reading Section Administered in September and May, 1971 to Students Participating in the Title I Project and a Control Group not Participating in the Title I Project in Grades 1-8 at Cibecue Day School

Test Period	California Achievement Test - Total Reading Mean Scores by Grade Level for Title I and Control Group															
	1st		2nd		3rd		4th		5th		6th		7th		8th	
	T_1 N=8[3]	C_2 N=30	T N=8	C_2 N=35	T N=4	C N=31	T N=8	C N=26	T N=8	C N=36	T N=5	C N=19	T N=4	C N=17	T N=5	C N=18
September Pre-Test Mean Score	.7	.8	.8	1.1	1.4	1.3	2.1	2.2	3.3	3.4	3.2	3.3	5.2	4.7	4.5	6.4
May Post-Test Mean Score	.9	1.3	1.0	1.4	1.5	1.5	2.3	2.4	3.2	3.5	3.9	3.9	3.7	3.6	4.3	6.4
Gain or Loss (+ or -)	+.2	+.5	+.2	+.3	+.1	+.2	+.2	+.2	-.1	+.1	+.7	+ .6	-1.5	-1.1	-.2	0

[1] T = Title I Group

[2] C = These two control groups received the services of Title I teacher aides. See Fort Apache "Overall Communication Skills" project and Table 25.

[3] N = Number of Students Tested

The analysis of data presented in Table 23 parallels the information previously presented in Table 22. Therefore, it is seen that Pre and Post California Achievement Test - Total Reading Section mean scores are reported for both target and control groups by grade. The target groups had the benefit of tutoring conducted by a reading specialist whereas the control groups did not. Note, however, in Table 23 that the control groups in grades one, two, and three had supplementary services from a Title I teacher aide at Cibecue Day School. For grades one, two and three the control group gains exceeded those of the Title I students. Grade four had an equal gain for both sections of .2 years. The Title I students in grades five and eight regressed compared to control populations. Grade seven showed a loss for both units with the Title I group losing more than the control group. The scores were -1.5, and -1.1 respectively. The Title I group in grade six, with an increase of .7, is the only class which showed more positive growth than did the control groups.

P I M A A G E N C Y S C H O O L S

READING TUTORING

I. Vital Statistics

A. School Name and Address: Pima Agency Schools
Sacaton, Arizona 85247

B. Component Cost: $44,572

C. Staffing Pattern: Professional - 2 full-time Title I reading teachers, 1 part-time Title I reading teacher, and 5 part-time regular program classroom teachers
Paraprofessional - 3 full-time Title I aides

D. Number of Students Participating: 88

E. Component Operator: John R. O'Brien

II. Component Objectives

To raise the reading levels of 88 elementary students at Casa Blanca, Gila Crossing, and St. John's by 1.0 or more years as measured by the California Achievement Test - Total Reading Section.

III. Evaluation

September Pre, January Mid, and May Post California Achievement Test - Total Reading Section.

IV. Procedures

At Casa Blanca and Gila Crossing, one full-time professional reading specialist and an aide were employed for each school. At St. John's, one part-time reading specialist, an aide, and five part-time 1740 specialists in the areas of social science, and arithmetic

were employed. The aides helped the teachers provide individual instruction to the students. The children at St. John's on the Junior High level, in addition to their daily reading improvement period, were able to avail themselves of additional h[illegible]n text-book reading in the areas of mathematics, science, and s[illegible]al science.

V. Results

Table 24

Comparison Between Pre, Mid, and Post Test Mean Scores on th[illegible] California Achievement Test-Total Reading Administered in Sept[illegible]ber, January, and May, 1971 to Students Participating by Grad[illegible] Level

Schools	Pre-Mid-Post California Achievement Test - Total Reading Mean Scores - Total Reading Section by Grade Level					
	Grade Level	No. of Students Tested	Sept. Pre Test	January Mid Test	Post Test	Amount of Gain or Loss (+ or -
Casa Blanca Day	2	23	1.3	1.8	1.9	+ 0.6
Gila Crossing	2	16	2.6	--	2.8	+ 0.2
Casa Blanca Day	3	20	1.3	2.0	2.6	+ 1.3
St. John's	5	14	5.0	5.5	6.1	+ 1.1
St. John's	6	15	5.5	5.8	6.3	+ 0.8

VI. Discussion of the Results

The data analysis presented in Table 24 reflects the Pre-Mid-Post Test mean scores obtained from the various target groups in the respective grade levels among the three schools participating in this project. The evaluation instrument was the California Achievement Test - Total Reading Section. The largest gain, 1.3 years, took place in the third grade with 20 students at Casa Blanca.

The lowest increase, .2 years, occurred at Gila Crossing in the second grade. St. John's, a mission school, had gains in 1.1 years in the fifth grade and .8 years at the sixth grade level. The analysis shows that one group, the fifth grade at St. John's was reading slightly above grade level at the time of the post-test. Analysis of the test data suggests that the expected mean rate of progress did increase in specific instances while in other instances, losses are noted. This suggests that a closer look at the variables that exist is needed at each school.

III

B I L I N G U A L A I D E S

HIGH SCHOOLS

None

ELEMENTARY SCHOOLS

Fort Apache Agency
Hopi Agency
Papago Agency
Pima Agency
Salt River Day School
Supai Day School

F O R T A P A C H E A G E N C Y S C H O O L S

BILINGUAL AIDES

I. Vital Statistics

A. School Name and Address: Fort Apache Agency
Whiteriver, Arizona 85941

B. Component Cost: $25,770

C. Staffing Pattern: Paraprofessional - seven Title I teacher aides

D. Number of Students Participating: 189

E. Component Operator: James H. Powell

II. Objectives

To raise each teacher aide's classroom students' reading/communication skill level 1.5 years as measured by California Achievement Test - Total Reading.

III. Evaluation

September Pre, May Post California Achievement Test - Total Reading.

IV. Procedures

Seven Title I teacher aides worked in self-contained lower grade classrooms with approximately 30 students eight hours daily. The teacher aide worked in conjunction with the regular program classroom teacher in reading and language arts activities in both individual and small group instruction. Two teacher aides were located at John F. Kennedy Day, two at Theodore Roosevelt Boarding, and three at Cibecue Day. In all three schools the aides were placed in the lower grade levels.

Table 25

Comparison Between Pre and Post Test Mean Scores on the California Achievement Test - Total Reading Section Administered in September and May, 1971 to Students with Classroom Aides at John F. Kennedy, Theodore Roosevelt, and Cibecue

Test Period	Cibecue			John F. Kennedy		Theodore Roosevelt	
	1st	2nd	3rd	1st	2nd	3rd	4th
	N*=30	N=35	N=31	N=18	N=15		
September Pre Test	0.8	1.1	1.3	0.9	1.6	No data Available	
May Post Test	1.3	1.4	1.5	1.2	1.9		
Amount of Gain or Loss (+ or -)	+0.5	+0.3	+0.2	+0.3	+0.3		

*N = Number of Students Tested

VI. Discussion of Results

California Achievement Test - Total Reading Section mean scores by grade were collated as a method for evaluating the success of this project at two of the three schools in the Fort Apache Agency. No data was reported from the Theodore Roosevelt Boarding School. Inspection of the results shows a maximum mean increase of .5 years and a minimum gain of .2 years. These figures are seen in the first grade at Cibecue and the third grade at the same site. Gains of .3 years were observed in the second grade at Cibecue and in both grades one and two at the John F. Kennedy School. As reported in previous discussions of results pertaining to the Apache youngsters the minimal grade point gains may be indicative of positive

growth when the severity of the language handicap is considered. However, the small rate of gain again suggests that a detailed analysis of procedures and activities is required.

H O P I A G E N C Y S C H O O L S

BILINGUAL AIDES

I. Vital Statistics

A. School Name and Address: Hopi Agency Schools
Keams Canyon, Arizona 86034

B. Component Cost: $137,237

C. Staffing Pattern: Paraprofessional - 29 teacher aides

D. Number of Students Participating: Approximately 900

E. Component Operator: Ernest Rice

II. Objectives

To increase the overall academic achievement of the children enrolled in the six agency schools 1.0 years as measured by the Wide Range Achievement Test.

III. Evaluation

October Pre, May Post Wide Range Achievement Test

IV. Procedures

A total of 29 aides were assigned to serve in 29 self-contained classrooms at the six Hopi Agency schools. The function of the Hopi-English speaking aides was to facilitate student progress in the areas of language, math and science. Teacher aides were employed locally from Hopi villages and were selected from applicants who either had children in the school or who were otherwise closely related to the interest and needs of the students. On teacher aide was assigned to each teacher involved in the Follow-

Thru program which is funded by the United States Office of Education through the Hopi Tribal Council. Eighteen aides were required in the Follow-Thru program. The remaining eleven aides were placed in regular program classrooms. The evaluation results which follow are for the teacher aide classrooms participating in the Follow-Thru program. Data involving the remaining eleven aides was not reported by the schools.

V. Results

Table 26

Comparison of Pre and Post Test Mean Scores on the Wide Range Achievement Test Administered in October and May, 1971 to Kindergarten Through Third Grade Students in Hopi Agency Schools

Grade Level	N=*	Wide Range Achievement Test Means Test Scores by Test Period								
		Reading			Spelling			Arithmetic		
		Pre	Post	Gain or Loss**	Pre	Post	Gain or Loss	Pre	Post	Gain or Loss
Kindergarten	48	.25	.86	+ 6.1	.58	1.00	+ 4.2	.59	1.2	+ 6.1
First	190	.77	1.86	+10.9	1.09	1.86	+ 7.7	1.04	2.09	+10.5
Second	163	2.29	3.03	+ 7.4	2.03	2.77	+ 7.4	2.23	2.77	+ 5.4
Third	187	3.35	3.67	+ 3.2	2.96	3.66	+ 7.0	3.03	3.21	+ 1.8
Total	588									

*N = Number of Students were based on enrollment figures
** = Gains or Losses are reported in months

VI. Discussion of Results

The data collected from the Wide Range Achievement Test was computed into mean values in three areas - Reading, Spelling, and Arithmetic.

These results are presented in Table 26 for each grade in which an aide was utilized within the parameters set forth in this project. Specifically, it may be seen that kindergartens, first, second, and third grades were involved. Note that five separate schools are represented within the enrollment figures. Gains or losses were reported in months. Analysis of the kindergarten population shows gains in all three criteria, i.e., reading, spelling, arithmetic. A 6.1, 4.2, and 6.1 month increase is seen. The first grade had discernible gains of 10.9, 7.7, and 10.5 months on the same criteria. For the second grade population, respective growth was reflected by the following mean scores: 7.4, 7.4, and 5.4 months. The final grade level, grade three, had increases of 3.2, 7.0, and 1.8 months. It is evident that the four grade levels showed varing degrees of growth.

P A P A G O A G E N C Y S C H O O L S

BILINGUAL AIDES

I. Vital Statistics

A. School Name and Address: Papago Agency Schools
Sells, Arizona 85634

B. Component Cost: $49,432

C. Staffing Pattern: Paraprofessional - 12 Title I aides

D. Number of Students Participating: 315

E. Component Operator: Richard T. Christman

II. Objectives

A. To increase the oral and written English skills by 1.0 years for the 315 elementary children in the four Papago Agency schools as measured by the Auditory Recall Test.

B. To significantly improve the attitudes of the 315 elementary children as measured by the FAATE - Semantic Differential Questionnaire.

III. Evaluation

A. September Pre, May Post Auditory Recall Test

B. October Pre, May Post FAATE Semantic Differential Questionnaire

IV. Procedures

Twelve bilingual teacher aides were assigned to 12 self-contained classrooms at the four agency schools. Under the direction of the classroom teachers, the aides assisted the children in assignment

completion, oral English, and helped small groups and individuals in various language arts activities.

V. Results

Table 27

Comparison between Pre and Post Test Mean Percentile Scores on the Auditory Recall Test Administered in January, 1971, and May 1971 to 34 students in Grades 1-6

Test Period and Number of Students Responding	Auditory Recall Test Sections		
	Letters	Numbers	Grand Mean
January Pre-Test (N=134) Mean Percentiles	84.9	67.1	76.0
May Post-Test (N=134) Mean Percentiles	76.0	74.0	75.0
Percent Gain or Loss	-8.9	+6.9	-1

VI. Discussion of Results

Table 27 presents the results of the Auditory Recall Test. Subjects were asked to repeat verbally an individual or sequence of numbers or letters. One hundred characters were included in either exercise. The figures in this table represent the mean percentiles obtained from a sample of 134 students. As can be seen, a decrease of 8.9% occurred on the letter portion while a 6.9% increase occurred on the number segment. An overall net loss of 1.0% was observed. An instrument with a wider scope of evaluative potential to measure possible gains or losses would have been helpful. In short, one could challenge whether auditory recall evaluations adequately or accurately measure overall communication skills development.

Table 28

Comparison Between Pre and Post Test Mean Scores on the FAATE Semantic Differential Questionnaire Administered in October 1970 and May 1971 to Students Participating in the Title I Project and a Control Group not Participating in the Title I Project

Test Periods	No. of Students Responding		FAATE Semantic Differential Factor Scores by Title I and Control Group									
			Self-Concept		Value of Education		Home Attitude Toward School		Attitude Toward Teachers		Composite Mean Scores	
	T*	C*	T	C	T	C	T	C	T	C	T	C
October Pre-Test Mean Scores	49	60	2.3	2.5	2.0	2.4	2.5	2.3	2.0	2.4	2.2	2.4
May Post-Test Mean Scores	55	57	2.4	2.5	2.3	2.5	2.2	2.2	2.4	2.4	2.3	2.4
Amount of Gain or Loss (+ or -)			- .1	0	- .3	- .1	+ .3	+.1	+ .4	0	- .1	0

*T = Title I Group

*C = Control Group

Discussion of Results

A secondary objective of this project was to improve attitudes toward education and self-concept. Four surveys utilizing semantic differential measurement techniques were created for this purpose. Students responded to pairs of word, e.g., "good" and "bad" on a five point continuum with one being the most positive and five being the most negative. The mean score results for both target and control groups are presented in this table. A loss between pre and post mean scores indicates a more positive attitude exists. (In the area of self-concept it can be seen that the Title I group lost ground as their mean score moved further toward the negative. The control group did not vary their position. The variable, value of education was assessed and both Title I and control groups became more negative with -.3 and -.1 losses respectively. On the home attitude toward school, i.e., the attitudes toward education held by parents, relatives, etc., as perceived by the children, each group improved with the Title I students gain of .3 exceeding the .1 in the control population. The attitude toward teachers value held by the control group did not change while the Title I unit became decidedly more negatively as their -.4 loss suggests. Therefore, it is seen that Title I students lost ground on three of the four variables measured in the attempt to ascertain the success of this project.

Although no gain in mean scores is noted, the losses are also not substantial. Accordingly, at this time it is difficult to ascertain

whether or not the project was successful in meeting the needs of the students as measured by the Semantic Differential Questionnaire. Also, it is questionable whether or not an abstract type evaluation instrument is appropriate for bilingual children at the elementary level.

P I M A A G E N C Y S C H O O L S

BILINGUAL AIDES

I. Vital Statistics

A. School Name and Address: Pima Agency Schools
Sacaton, Arizona 852[illegible]7

B. Component Cost: $37,028

C. Staffing Pattern: Professional - four regular program classroom teachers, one Title I teacher/librarian
Paraprofessional - four Title I classroom aides

D. Number of Students Participating: 77

E. Component Operator: John R. O'Brien

II. Component Objective

To raise the overall academic achievement of 77 elementary students at Casa Blanca, Gila Crossing, Pima Central, and St. John's 1.0 years as measured by California Achievement Test - Total Battery.

III. Evaluation

September Pre, January Mid, and May Post California Achievement Test

IV. Procedures

Four classes were led by regular classroom teachers with supplemental assistance from Title I aides in each classroom. The aides provided individual instruction to the students in the Title I group. Culturally oriented materials were developed and reproduced, and transparencies and filmstrips were made. Also, a teacher-librarian

who was provided by Title I, aided in the developing, coordinating and disseminating of materials to the teachers.

V. Results

Table 29

Comparison Between Pre and Post Test Mean Scores on the California Achievement Test - Total Battery Administered in September, January, and May, 1971 to Students Participating in Pima Agency Schools by Grade Level

School	Pre-Mid-Post California Achievement Test - Total Battery Mean Scores by Grade Level					
	Grade Level	# Students Tested	September Pre-Test	January Mid-Test	May Post-Test	Amt Gain or Loss (+ -)
Casa Blanca	4	25	--	3.7	4.1	+ 0.5
Gila Crossing	4	8	--	3.6	4.8	+ 1.2
Pima Central	8	24	6.9	--	7.2	+ .3
St. John's	8	20	5.9	6.5	7.0	+ 1.1

VI. Discussion of Results

The figures contained in Table 29 reflect the mean scores on the California Achievement Test - Total Test Battery by grade for the four separate schools which utilized Title I teacher aides for this project. Analysis of the data shows that two target classes, the fourth grade at Gila Crossing and the 8th grade at St. John's had the larger gains with 1.2 and 1.3 years. At the same time in equivalent grade levels, i.e., the fourth grade at Casa Blanca and the 8th grade at Pima Central, gained only .5 and .3 years respectively. From the data that is presented, it is evident that varied results can be obtained from programs with the same design. This

may be a function of both personnel and the specific make-up of a target group.

S A L T R I V E R D A Y S C H O O L

TITLE I LIBRARY AIDES

I. Vital Statistics

A. School Name and Address: Salt River Day School
Route 1, Box 117
Scottsdale, Arizona 85257

B. Component Cost: $5,773

C. Staffing Pattern: Professional - One full time
Title I Library Aide

D. Number of Students Participating: 78

E. Component Operator: Anna T. Martin

II. Component Objectives

To significantly increase 78 elementary students library skills as measured by a pre-post library knowledge and opinion questionnaire.

III. Evaluation

September Pre, and May Post library knowledge and opinion questionnaire.

IV. Procedures

The target group of children participated weekly in small groups in the school library under the direction of a Title I library aide. The children received instruction in library skills through using it as a total resource center (television, story corners, newspapers, records, magazines, etc.).

V. Results

Following are the highlights of the results as measured by the questionnaire.

A. There was a 10% gain in the number of children who expressed knowledge of how to check out a library book.

B. Twenty-five percent (25%) more children believed they understood the use and purposes of card catalogs.

C. Twelve percent (12%) more children felt that the library serves a special function in the school program.

D. There was a 12% increase of children who believed that libraries provide opportunities to learn about others, and a 22% increase of children who believed that libraries are to assist them in self exploration.

E. Fourteen percent (14%) more children stated that the library helped them with their school work and 18% more said it should be a regular part of their school work.

F. 12% more children expressed that they had many books in their homes.

VI. Discussion of Results

In most cases, the gains were small with the largest relating to knowledge about the card catalog. This specific questionnaire was designed to measure knowledge, skills, and attitudes in relation to the library. However, various other techniques for measuring increases in library skills would have been helpful in ascertaining whether or not the project objectives had been met. With the present data it is difficult to draw valid conclusions concerning the success of the project. It may also be noted that the library facility did not lend itself to the parameters set forth in the project.

S U P A I D A Y S C H O O L

OVERALL COMMUNICATION SKILLS

I. Vital Statistics

A. School Name and Address: Supai Day School
Supai, Arizona

B. Component Cost: $10,000

C. Staffing Pattern: Paraprofessional - Two Title I Classroom Aides

D. Number of Students Participating: 24

E. Component Operator: Roberta Hunt

II. Component Objectives

To increase the reading achievement of 24 students by 1.0 years as measured by the Scott Foresman Reading Test

III. Evaluation

Pre and Post Scott Foresman Reading Test

IV. Procedures

Two bilingual aides were employed to work with 24 students in grades one through four. The aides assisted the classroom teacher in reading, writing, and speaking activities in addition to working as a liaison between the community and school. Due to the extreme isolation of students living in the Havasupai Canyon, an outside supplemental field trip was taken to broaden the student's experiential base and motivate communication development.

V. Results

Test data not reported.

VI. Discussion of Results

Because test data was not reported no conclusions can be drawn.

Cognitive Domain Summary

The Phoenix Area operated 13 projects in the cognitive domain totaling $506,516. These projects had as their objectives improved reading/communication and related language skills. Seventy-seven professional and paraprofessional staff were employed to work with 2,177 target students through Title I funds. In addition many employees paid through regular program sources participated in the overall operation of the projects.

Of the three categories of expenditures in the cognitive domain, $265,240 was spent on bilingual classroom aides, $180,054 on reading laboratories, and $61,222 for tutoring. Fifty-six staff members were funded by Title I as aides, 14 for laboratories, and 7 for tutoring. There was a total of 1,583 students served by the aides, 415 served in laboratories, and 197 served by tutoring.

Fully recognizing the weaknesses of the research designs and systems of comparison in the three categories within the cognitive domain the following interpretations should be considered as hypothesis based primarily on observable trends.

The largest gains occurred at Sherman and Stewart Indian High schools in their reading laboratories. Stewart showed a mean growth of 1.9 years as measured by California Achievement Test, 2.1 years by the Wide Range Achievement Test, and 5.3 years by the Biometrics Eye Graph Analysis. The mean growth of full-term target students at Sherman was 2.9 years as measured by the California Reading Test.

Average gains in the Santa Rosa Boarding School and Phoenix Indian High School laboratories also showed more than one years growth. From this data, it is evident that the laboratory approach was highly successful.

Tutoring components showed varied impact upon growth patterns. A review of 13 grade level groupings in the Fort Apache component shows that only one grade level group, John F. Kennedy fourth graders, grew more than one year, and in the cases of the Cibecue seventh and eighth grades, an actual loss was shown. The average gain of the target students in the Pima Agency tutoring component was .8 years; however, three of the five target groups in this component did not meet the objectives while the other two groups did. This may suggest that tutoring approaches can be successful, with the degree of that success dependent upon methods, materials and personnel.

Of the six components utilizing bilingual aides, all six failed to meet their objectives. Even though some isolated groups, (Hope first graders, Gila Crossing fourth graders, and St. John's eighth graders) showed gains that met objectives, the composite growth in all cases was seemingly small.

It can be observed then, that the laboratory approach was the most successful in meeting objectives, and in most cases, the objectives were surpassed.

AFFECTIVE DOMAIN PROJECTS

C H A P T E R V

Introduction

The affective domain is that realm of behavior which relates to an individuals' feelings, emotions, values, personality and their collective impact upon his individual, social, and academic development. These conditions are characterized by such affective reactions as frustration, deprivation, and gratification. A special condition is the lack of goal clarity generally characterized by various states of anxiety. These behavioral states in turn relate to motives like agression, affiliation, avoidance, and so forth. As these aspects interact with various situational and personality characteristics, they combine to determine overt bahavior. Thus, projects in the affective domain had as primary objectives the improvement of attitudes and/or the reduction of dysfunction kinds of behavior.

Both local and national research substantiates the exceptionally high percentage of Indian students who drop out from school or who are involved in disciplinary actions during the school year. This situation was a critical concern among the Indian parents, students and school personnel who participated in the numerous Title I planning activities. It was their mutual consensus that Title I expenditures be

utilized to support programs within the affective domain. The projects fell into four basic categories: I. Self Image, II. Dropout Prevention/Attendance Improvement, III. Vocational Awareness, and Other. Table 29 indicates the various project costs within the affective domain for the Phoenix Area during Fiscal 1971.

As may be seen in Table 29 the largest amount, $302,617 was expended in the dropout prevention category. The smallest amount, $27,691, went into a vocational awareness program at Stewart Indian High School. Similar amounts of money, $159,779 and $154,134 were utilized for self-image improvements and a mixture of projects listed in the Other category. The Other category refers to the activities conducted by Tribal Education Coordinators, who functioned at the community and school level with both elementary and secondary students.

The staffing pattern is shown in Table 30. Paralleling the expenditure ratios, the largest number of staff, 7 professional and 19 paraprofessional worked in the dropout reduction and attendance improvement projects. Only 2 individuals were used in the vocational awareness program. A total of 16 individuals were involved in the self image activities, and 13 people conducted the components included in the Other category.

Table 29

Amount Funded in Fiscal 1971 Title I Projects in the Affective Domain by Agency or School

Agency or School	Affective Domain Projects				
	Self Image	Dropout Prevention	Vocational Awareness	Other	Total
High Schools					
Phoenix Indian	141,614	77,843		10,556	330,013
Sherman Indian		135,200		20,612	155,812
Stewart Indian		50,000	27,691		77,691
Elementary Schools					
Fort Apache Agency		13,535		28,438	41,973
Hopi Agency		26,039		21,824	47,863
Papago Agency				34,636	34,636
Pima Agency				20,727	20,727
Salt River Day School	18,165			17,341	35,506
Supai Day School					
Total	159,779	302,617	27,691	154,134	744,221

Table 30

Number of Professional and Paraprofessional Staff Positions Funded by Title I in Affective Domain Projects by Agency or School

Agency or School	Affective Domain Projects									
	Self-Image		Dropout Prevention & Attendance Imprv.		Vocational Awareness		Other		Total	
	Prof.*	Para.**	Prof.	Para.	Prof.	Para.	Prof.	Para.	Prof.	Para.
High Schools										
Phoenix Indian	3	11	3	3			1		7	14
Sherman Indian			1	10				2	1	12
Stewart Indian			3		1	1			4	1
Elementary Schools										
Ft Apache Agcy				1			1	1	1	2
Hopi Agency				5			1	1	1	6
Papago Agency								1	1	1
Pima Agency							1	1	1	1
Salt River Day	2						1	1	3	1
Supai Day Sch.										
Total	5	11	7	19	1	1	6	7	19	38

* Prof. = Professional

** Para. = Paraprofessional

In Table 31 the reader will find an outline of the number of students served by projects in the affective domain. A total of 2,059 youngsters participated with the largest number, 1,307, in drop-out prevention and attendance improvement. Forty students, the smallest group, were involved in the vocational awareness component. 398 target students were in the self-image area. A total of 314 students took part in activities in the Other category. No student totals are shown for the education coordinators' whose projects are contained in the Other column. They dealt with community groups and contacted many youngsters at their respective homes.

It should be noted that many, if not all, projects in the affective area had overlapping objectives. For example, the 310 students listed in the self-image column at Phoenix Indian High School participated in a project which also sought to improve attendance and lower the drop-out rate. As could be imagined, the types of procedures in the projects varied considerably. However, the principal goal was to promote involvement among students and to create a setting within which the student could develop personalized kinds of experiences. Additionally, supplementary staff were provided to insure concentration of effort with students. Ultimately, it was hoped that target students would begin to shift their attitudes to a more positive level and to make their school experiences more relevant and meaningful and a corresponding academic achievement growth would result. The more detailed analyses of these varied projects are included in the subsequent pages in the following order: (I) Self-Image; (II) Drop-out Prevention/Attendance Improvement, (III) Vocational Awareness, and (IV) Other.

Table 31

Number of Students Participating in Title I Projects in Fiscal 1971 in Affective Domain Projects by Agency or School

Agency or School	Affective Domain Projects				
	Self-Image	Dropout Prevt'n & Attendance Ip*	Vocational Awareness	Other	Total
High Schools					
Phoenix Indian	310	482		82	874
Sherman Indian		450		232	682
Stewart Indian		60	40		100
Elementary Schools					
Ft. Apache Agency		235			235
Hopi Agency		80			80
Papago Agency					
Pima Agency					
Salt River Day School	88				88
Supai Day School					
Total	398	1,307	40	314	2,059

* Dropout Prevention/Attendance Improvement

I

S E L F I M A G E

HIGH SCHOOLS

Phoenix Indian High School

ELEMENTARY SCHOOLS

Salt River Day School

P H O E N I X I N D I A N H I G H S C H O O L

SELF-IMAGE

I. Vital Statistics

A. School Name and Address: Phoenix Indian High School
P.O. Box 7188
Phoenix, Arizona 85011

B. Component Cost: $141,614

C. Staffing Pattern: Professional - Two counselors, and one social worker
Paraprofessional - One counselor assistant, two clerical personnel, and eight counselor aides

D. Number of Students Participating: 310 7th, 8th and 9th graders

E. Component Operator: Miles Bollinger

II. Component Objectives

A. To reduce the number of student incidents of anti-social bahavior as measured by incidence of major infractions.

B. To improve the student's attitude toward school as measured by FAATE Inventory.

C. To increase the student's level of emotional and social stability as measured by questionnaires devised by the dormitory staff.

III. Evaluation

Pre-Mid Post FAATE Inventory

Pre-Mid Staff Questionnaire

Quantitative Behavioral Analysis

IV. Procedures

310 seventh, eighth, and ninth graders were selected to participate in a progressive dormitory experiment. With a staff of two counselors, one social worker, one counselor assistant, and eight counselor aides the program was designed to be co-educational and was set up to provide professional guidance services and direct contact with the aides via small group situations. The students were to discuss their problems, and through a cooperative effort, establish guidelines for the dormitory operation. The overall idea was to foster independent thinking, interest in school, and a true sense of community among all.

V. Results

Table 32

Comparison Between Pre, Mid, and Post Test Mean Scores on the FAATE - Semantic Differential Questionnaire Administered in September, January, and May, 1971 to the Overall School Population and the Title I Dormitory Group

Test Period and Group	Number of Students Responding	FAATE - Semantic Differential Factor Mean Scores				
		Self Concept	Value of Education	Home Attitude Toward School	Attitude Toward Teachers	Attitude Toward Recreation
September Pre (Overall School)	622	3.28	2.23	2.12	2.51	2.87
January Mid (Title I Dorm Group)	63	3.34	2.35	2.17	2.90	2.85
May Post (Title I Dorm Group)	138	3.21	2.47	2.37	2.82	3.16
Amount Gain or Loss (+ or -)		+ 0.13	- 0.12	- 0.20	+ 0.08	- 0.31

VI. Discussion of Results

Table 32 presents the analysis of data obtained from the FAATE Inventory - Semantic Differential Section on five factors for target students. See page 129 for an explanation of the FAATE Inventory. The seventh, eighth, and ninth grade students were included in the design of this project. The scores are reported as means. Differences in the number of students are explained as follows: The September pre-test encompassed the entire school population in order to establish baseline data. Those values are seen left to right along the first column. The first sample, limited to target students, is reported as the January Mid-test. Post-test results were collected during May. The gains or losses are comparisons between mid and post-test scores. For example, gains of .13 and .08 were observed for the self concept and attitude toward school regressions of -.12 and -.20 took place. The largest loss, .31 occurred on the attitude toward recreation factor. It appears that two important changes in attitude evolved. Students had improved self concept and their feelings toward teachers became more positive. However, the losses tend to counter balance the gains and prevent definite conclusions about overall project success.

To assess specific feelings regarding student perception of dormitory living and to identify any changes that might result from the implementation of the Title I project, a questionnaire of 39 items was designed by the component staff. Twenty of these questions, which assessed specific aspects of the project objectives are shown in Table 33.

A copy of all the questions follows the Table. It appears difficult to make adequate conclusions from this data. Perhaps with more statistical treatment better data might have been provided for evaluation purposes. This suggests that when objectives are formulated, considerable attention needs to be given to the ways and means for accurate and meaningful measurement.

Table 33

Comparison Between Pre, Mid, and Post Test Response on a Dormitory Questionnaire Administered to the Title I Dormitory Group

Item	Questionnaire Responses by Test Period											
	Really True		True		Maybe True		Not True		Really Not True		Not True	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1*	10%	+22%	29%	-16%	20%	+35%	15%	-16%	.5%	+ 0	20%	+10%
2	10%	+16%	52%	-44%	20%	-14%	3%	-10%	3%	+ 2%	9%	-14%
3	23%	+32%	51%	-44%	8%	+12%	7%	+ 4%	3%	- 6%	3%	+ 2%
4	2%	- 4%	16%	-10%	20%	+18%	38%	+48%	5%	+ 6%	14%	+10%
6	8%	8%	10%	+ 8%	8%	+ 6%	40%	-38%	19%	-18%	14%	-24%
7	14%	- 4%	29%	+30%	20%	-18%	21%	+16%	8%	-12%	6%	-16%
12	7%	+14%	18%	+24%	27%	-20%	27%	+18%	5%	+ 2%	12%	-22%
13	8%	+28%	19%	+20%	16%	+18%	30%	+14%	8%	+ 2%	15%	+20%
14	7%	+16%	27%	* 26%	27%	-18%	16%	+ 0	4%	* 4%	18%	-34%
16	2%	+10%	11%	+20%	12%	+28%	52%	+26%	9%	+ 4%	13%	+12%
20	21%	+44%	47%	-32%	16%	- 8%	7%	+ 6%	2%	- 6%	4%	* 4%
24	2%	- 8%	14%	+ 2%	21%	+12%	27%	+42%	7%	+10%	13%	-22%
27	3%	+ 0	16%	+ 6%	23%	+14%	18%	+34%	5%	+10%	24%	*24%
28	6%	+12%	41%	+44%	27%	-14%	8%	-12%	2%	- 4%	10%	*10%
30	4%	* 4%	13%	+14%	19%	+20%	15%	-16%	8%	+ 4%	29%	-36%
32	5%	-10%	17%	+14%	24%	-28%	34%	-22%	7%	- 4%	12%	-20%
34	8%	* 8%	26%	-18%	22%	-14%	14%	+12%	4%	+12%	18%	-30%
35	6%	+ 4%	12%	-18%	21%	+16%	33%	+32%	9%	+ 8%	16%	*16%
37	17%	+20%	37%	+42%	17%	-14%	9%	+ 4%	5%	- 8%	11%	+ 8%
38	16%	+18%	26%	-18%	27%	- 8%	7%	+ 0	.5%	+ 4%	19%	-36%

* See questionnaire items on next page - Asterick items were tabulated.

DORMITORY QUESTIONNAIRE

* 1. My dorm is different from other dorms at the school.
* 2. My teachers and I get along with each other.
* 3. I wanted to come to Phoenix Indian School.
* 4. I have many questions about school which no one has answered.
5. My parents write a lot.
* 6. I would like to be in another dorm.
* 7. There is a lot to do to keep from getting bored in my dorm.
8. I can talk to my family about most anything.
9. I don't like classes.
10. I have friends and relatives who have been to Phoenix Indian School before.
11. My family wants to know what I'm doing at school.
* 12. I feel I can make a change in this dorm.
* 13. Students in other dorms say bad things about my dorm.
* 14. Our dorm staff seems more interested in us than the staff in other dorms.
15. Someone else made me come to Phoenix Indian School.
* 16. My teachers talk with me about the dorm, and some visit the dorm.
17. I am homesick.
18. I know the rules of my dorm.
19. Students in other dorms think my dorm is a good one.
* 20. My roommates and I get along with each other.
21. I would rather be at home or at some other school.
22. Nobody at home misses me.
23. There are special things I like to do and places I would like to go that I don't get to see or do.
* 24. There are too many adult dorm staff in my dorm.
25. I can talk to my roommates about almost anything.
26. My parents don't know what happens here at school.
* 27. The dorm staff doesn't talk with my teachers or talk to me about my classes.
* 28. It is easy to know other students better in my dorm.
29. There are too many meetings in my dorm.
* 30. The dorm staff writes to my family and knows something about them.
31. I have been to another boarding school.
* 32. There are too many rules in my dorm.
33. Classes here are not as good as at the school I came from.
* 34. It seems like I like my dorm better than my friends like their dorm.
* 35. I can't talk to my adult in this dorm about anything.
36. I was in public school last year.
* 37. I enjoy school more this year.
* 38. The dorm staff care about me.
39. I have attended Phoenix Indian School before coming this year.

* Indicates questions presented in Table 34

S A L T R I V E R D A Y S C H O O L

SELF-IMAGE

I. Vital Statistics

A. School Name and Address: Salt River Day School
Route 1, Box 117
Scottsdale, Arizona 85257

B. Component Cost: $18,165

C. Staffing Pattern: Professional - Two counselors

D. Number of Students Participating: 88

E. Component Operator: Anna T. Martin

II. Component Objectives

A. To improve the children's self-images and consequently increase their expectation of success in school and life in general as measured by the FAATE Semantic Differential Questionnaire.

B. To improve the children's attitudes toward education as measured by the FAATE Semantic Differential Questionnaire.

C. To improve the children's average daily attendance as measured by attendance reports.

III. Evaluation

A. October Pre and May Post FAATE Semantic Differential - Self Concept Factor Scale.

B. October Pre and May Post FAATE Semantic Differential - Value of Education Scale.

C. Comparison of Attendance Reports in 1969-70 to 1970-71.

IV. Procedures

The course of action in this project was quite simple. Through a process of referrals based upon observable health problems, attendance difficulties, emotional problems, and inadequate clothing, students were brought into contact with the counselor. The Title I counselor then held individual sessions and through various diagnostic techniques attempted to identify specific problems and remediate them. When necessary, home visits took place, and follow-up sessions were held with teachers in order to insure continuity. During the home visits and parent-teacher meetings, parents were encouraged to become involved in the operation of their school. To be more specific, the following totals are shown relative to the particular types of contacts and their frequency. Office contacts made by the counselor were: 661 total including 568 students and 58 parents. A total of 213 home visits were conducted, over 100 teachers contacts were completed, and 97 outside agencies were contacted.

V. Results

Table 34

Comparison Between Pre and Post Test Mean Scores on the FAATE Semantic Differential Questionnaire (Self Concept and Value of Education Factor Scales) Administered in October, 1970 and May 1971 by Grade Levels

Grade Level	No. of Students Responding	FAATE Semantic Differential Mean Scores by Test Period					
		Self Concept			Value of Education		
		Pre	Pre	Amt Gain or Loss	Pre	Pre	Amt Gain or Loss
Third	25	2.50	2.26	+ .24	2.10	2.03	+ .07
Fourth	27	2.15	2.18	- .03	1.89	2.20	- .31
Fifth	17	2.14	2.02	+ .12	1.99	1.93	+ .06
Sixth	8	2.36	2.64	- .28	2.33	2.03	+ .30

VI. Discussion of Results

Table 34 is a compilation of mean scores obtained from the FAATE Inventory on a pre-post basis for the target students at the Salt River Day School. See page 129 for an explanation of the FAATE Inventory. The comparison is made between the entire target group on pre-tests to a random sample of target students on the post evaluation. In this project only two of the five factors were assessed, self concept and value of education. The data shows that the third and fifth grades exhibited more positive attitudes on both factors. Their respective gains were: Third grade self concept (+.24), value of education (+.07). Fifth grade self concept is +.2, value of education is +.06. The sixth grade had a loss. -.28 on self concept but increased their value of education mean (+.30). The fourth grade lost on both factors. The relatively small numbers used in the post testing may be a factor tending to distort results and consequently limiting the validity of conclusions.

One objective of this project was to improve the attendance. Table 35 presents the analysis of results. The breakdown is made by month compared to the same month of the previous school year. The actual number of absences is given for both years and then converted into percentages thus allowing direct comparison. A substantial improvement for the year has occurred. Only one month, October, showed a decrease in attendance compared to the previous year, and it was only 1%. The remaining seven months showed increases. An additional comparison for a three year period is shown and shows a trend of increased attendance.

Table 35

Comparison of Attendance Reports in 1969-70 to 1970-71 for Students at the Salt River Day School

Month	Number of Days	Attendance Report				
		Number Enrolled	No. Days Absent	Percent Present	Increase	Decrease
October						
69-70	23	172	312	92%		1%
70-71	19	178	281	91%		
November						
69-70	19	175	537	84%		
70-71	18	177	376	87%	3%	
December						
69-70	15	177	451	83%		
70-71	14	177	243	90%	7%	
January						
69-70	20	178	688	80%		
70-71	20	177	560	84%	4%	
February						
69-70	19	175	560	83%		
70-71	19	179	507	85%	2%	
March						
69-70	21	179	758	79%		
70-71	21	178	622	83%	4%	
April						
69-70	19	179	688	80%		
70-71	21	178	532	88%	8%	
May						
69-70	18	182	724	77%		
70-71	15	178	319	88%	11%	

YEARLY AVERAGE ATTENDANCE

1968-1969 ---------- 77%
1969-1970 ---------- 82% ——— 5% increase
1970-1971 ---------- 87% ——— 5% increase

II

D R O P - O U T P R E V E N T I O N

HIGH SCHOOLS

1. Phoenix Indian High School
   a. ROTC
   b. Aides
   c. Art

2. Sherman Indian High School
   a. Art
   b. Recreation
   c. etc.
   d. Impact

3. Stewart Indian High School

ELEMENTARY SCHOOLS

1. Fort Apache Agency

2. Hopi Agency

P H O E N I X I N D I A N H I G H S C H O O L

DROPOUT PREVENTION

I. Vital Statistics

A. School Name and Address: Phoenix Indian High School
P.O. Box 7188
Phoenix, Arizona 85011

B. Component Cost: $20,000

C. Staffing Pattern: Professional - Three full-time Marine Corps Personnel

D. Number of Students Participating: 150

E. Component Operator: Colonel Clay Boyd

II. Component Objectives

To reduce the number of student incidents of anti-social behavior, and to improve the students' level of emotional and social stability as measured by an analysis of rules infraction, and class absence reports.

III. Evaluation

A. Personal evaluation of Phoenix Indian High School staff excluding MCJROTC Instructors.

B. Analysis of class absentee reports.

C. Analysis of school drop-outs and a resume of extra-curricular activities participated in by Cadets.

IV. Procedures

A basic military science course of 96 contact hours per student served as the base course outlined in MCO-PI-5336 Marine Corps Junior Reserve Officer Training Corps standard operating procedures. Students received the standard cadet ROTC training.

V. Results

The following are reported by the evaluators of this component:

A. Staff Evaluation - Selected staff members of Phoenix Indian High School, including faculty, administration, guidance, and maintenance were requested to comment on their personal observation of the students enrolled in the MCJROTC Program as compared to non-cadet students to include attitude, personal appearance, conduct, academic achievement, courtesy and self image. A summary of these comments is as follows:

> "A universal consensus is that the program has developed in the Cadets a sense of an improved self image and self confidence. The Cadets have developed an improved sense of responsibility to themselves and to others, and their personal appearance and courtesy are superior to non-cadets. The Cadets show more interest in classes and seem to realize more the importance of an education. All of the ROTC subjects studied by the Cadets reinforce in varying degrees to their other academic courses. They study military history courses. The math courses are reinforced by the practical application of math in map reading. Personal hygiene and first aid adds to health courses."

B. Absentee Reports

"An analysis of unexcused class absences, which is one indicator of student attitude and sense of responsibility, shows that Cadets

composing 29.2% of the male student body were responsible for 16.6% of the total male student absences for the study period."

C. Drop-out Rate - During the reporting period, 41 male students were dropped from school. Of this number, 8 were Cadets who were dropped for the following reasons:

1. Seven (7) transferred to other school/parents request
2. One (1) disciplinary reasons

D. Activities - Following is a summary of the extra-curricular activities of the Cadets during the year.

10 on campus color guard assignments

16 off campus color guard assignments

8 parking details

1 all Cadet firing range operation

5 parades (one first prize)

1 beauty queen escort

7 rifle team matches

1 Inspector General's inspection

1 trip to Camp Pendleton

1 open house

The following comments were made about these activities:

"These activities are a big influence on the Cadets. Besides the obvious benefit of exposure and experience, they assist in giving the Cadets a sense of belonging to a respected unit, not just the Marine Corps but Phoenix Indian High School. They provide a sense of accomplishment that betters their self image and self

confidence not only as individuals but also as Indians. To be an integral part of any activity that required organization and timing exercises the sense of responsibility, both personal and unit."

VI. Discussion of Results

The narrative presented by the various evaluators indicates that participants in the MCJROTC Program took part in numerous activities during the course of the year. The subjective comments suggests that target students do in fact have more poise and responsibility than do non-target participants. Relative to attendance and drop-out rates common to the school, it can be seen that MCJROTC students have considerably better records. However, in terms of the stated objectives, e.g., improving emotional and social stability and reducing the number of infractions, no conclusions may be drawn.

P H O E N I X I N D I A N H I G H S C H O O L

DROP-OUT PREVENTION

Student Aides

I. Vital Statistics

A. School Name and Address: Phoenix Indian High School
P.O. Box 7188
Phoenix, Arizona 85011

B. Component Cost: $42,843

C. Staffing Pattern: 182 Student Aides

D. Number of Students Participating: 182

E. Component Operator: Frank Chapman

II. Component Objectives

A. To significantly increase student involvement in the operation of the total school program and basic work skills as measured by Teacher Rating Scale.

B. To improve students' attitude toward school and education as measured by FAATE Inventory.

III. Evaluation

A. Teacher Ratings of student involvement and basic acquired work skills.

B. Pre-Post FAATE - Semantic Differential Questionnaire.

IV. Procedures

The work experience program included the following student aide positions by the number of students involved.

Teacher Aides	30
Clerical Aides	32
Media Aides	9
Library Aides	11
Dormitory Aides	100

These positions were designed to give the student an opportunity to apply the skills acquired in the classrooms to a practical setting. Selection of participants was based on staff recommendations of those students who exhibited the greatest need for attitude and work skill improvement. The student aides worked ten hours per week at $1.50 per hour. The project was contracted to the Student Council which disbursed all funds to the students' bank accounts.

V. Results

Table 36

Teacher Ratings of the Attitudes of 182 Students Aide Workers

Items	Teacher Rating	
	Yes	No
Shows up for work regularly	13	59
Missed work: 1-3 times	43	
4 or more times	16	
On time for Work:	131	
Late for Work: 1-3 times	40	
4 or more times	11	
Interested in the Job	170	12
Responsible Aide	173	9
Improved Attitude	173	9
Works well with Supervisor	180	2
Works well with other students	180	2
Has Improved Skills	180	2

VI. Discussion of Results

A rating chart was designed in an attempt to assess various factor related to job performance. All jobs were in some manner connected to regular school activities, i.e., teacher aides, librarian aides, clerical aides, audio-visual aides, etc. Table 36 presents the responses of those supervisors regarding student's work and/or work habits. Inspecting the table, one sees apparent positive growth in nearly all categories. For example, question number nine indicates that the supervisors believed 173 out of 182 students had improved. Only one negative trend stands out, students did tend to miss work or fail to show up on time. Nevertheless, on an overall basis it would appear that students performed well and did in fact become involved, in the operation of the school program.

Table 37

Comparison Between Mid and Post Test Mean Scores on the FAATE - Semantic Differential Questionnaire Administered in September and May, 1971, to Student Aide Workers at PIHS

Test Period	FAATE Semantic Differential Questionnaire Mean Scores				
	Self Concept	Value of Education	Home Attitude T'rd School	Attitude T'rd Teacher	Attitude T'rd Recreation
January Mid	3.07	2.20	1.93	2.71	3.38
May Post-Test	3.39	2.21	2.14	2.86	3.50
Amount of Gain or Loss (+ -)	-0.32	-0.01	-0.21	-0.15	-0.12

Discussion of Results

A mid and post-test evaluation was conducted utilizing the FAATE Inventory - Semantic Differential Section as seen in Table 37. Values were reported as mean scores on a mid-post-test basis. See page 129 for explanation of FAATE I ntory. The pre-test data was computed from the entire school ulation so as to provide an accurate baseline analysis but is n reported in the table. Mid and Post data refer directly to tar et students. From the values presented it can be observed that losses took place on all five factors, self concept, value of education, home attitude toward school, attitude toward teachers, and attitude toward recreation. The largest losses are seen in self concept and home attitude toward school with post means of -.32 and -.21 respectively. It may be concluded that students who participated in this project did not in any instance improve their attitudes as measured by the instrument.

P H O E N I X I N D I A N H I G H S C H O O L

DROP-OUT PREVENTION

I. Vital Statistics

A. School Name and Address: Phoenix Indian High School
P.O. Box 7188
Phoenix, Arizona 85011

B. Component Cost: $15,000

C. Staffing Pattern: Professional One part time Regular Program art teacher, and three part-time Title I aides

D. Number of Students Participating: 150

E. Component Operator: Winton W. Coles

II. Component Objectives

To significantly improve the self-image of the 150 target students as measured by FAATE Semantic Differential Questionnaire.

III. Evaluation

Pre-Post FAATE Semantic Differential Questionnaire

IV. Procedures

Three qualified and experienced instructional aides, under the supervision of a professional art teacher, were used to work with small groups involved in drawing and painting, ceramics, beadwork, leathercraft, dance costuming, and other art and crafts media. The Title I staff worked with groups of up to 30 students each depending upon the activity and the supervision required. The

overall program involved approximately 150 students. The art and crafts activities were offered on Tuesday, Wednesday, and Thrusday evenings, and Saturday and Sunday afternoons on an open studio basis. Holding the activity in the regular art studio allowed use of existing facilities, provided a stimulating and esthetic atmosphere, promoted a desired change from the stodgy dormitory environment and offered the opportunity for the student to "go to art class." Students exhibiting dysfunctional behavior were encouraged to attend the art classes. The Guidance Department and Pupil Personnel Services suggested and/or recommended students.

Native Indian craftsmen were brought to the school to enrich the activity and to provide an additional source of pride in the professional skills and techniques indigenous to the tribes and their respective cultures.

Trips were made to reservation day schools for one day art shows and demonstrations of craft skills, projecting a feeling of self worth and displaying this feeling to younger Indian children.

The activity was supervised by the professional art teacher, the existing regular program art-crafts instructor, on an over-time basis.

V. Results

No results were reported.

VI. Discussion of Results

Because the data is not available, no conclusions can be drawn.

S H E R M A N I N D I A N H I G H S C H O O L

DROP-OUT PREVENTION

Parent Visitation

I. Vital Statistics

A. School Name and Address: Sherman Indian High School
9010 Magnolia Street
Riverside, California 92503

B. Component Cost: $81,000

C. Staffing Pattern: Professional · Regular Staff

D. Number of Students Participating: 250

E. Component Operator: Harold B. Nading

II. Component Objectives

To decrease the dropout rate 25% as determined by the comparison between dropouts in 1969-70 and 1970-71.

III. Evaluation

Comparison between the number and percent of student dropouts in 1969-70 and 1970-71.

IV. Procedures

Through the use of an attitudinal survey, potential dropouts were identified. Referrals by staff were also utilized in establishing the target group. Parents of these students were then brought to the school for a three to five day visit depending on the need of the student. It was hoped that the interaction between parent and student would result in easing homesicknesses, improving attitudes,

and reducing dropouts. In all, 250 parents visited their children during the Spring semester. During these visitations, parents were asked to complete out a questionnaire concerning their views of all the Title I components at Sherman Indian High School.

V. Results

Table 38

Comparison Between the Number and Percent of Student Dropouts in 1969-70 and 1970-71 School Years for Students in Grades Nine Through Twelve

School Year	Total School Enrollment	Student Dropouts	
		Number	Percent of Total Enrollment
1969-70	611	162	26.5%
1970-71	637	111	17.4%
Difference (+ or -)		- 51	- 9.1%

VI. Discussion of Results

Table 38 shows a comparison of dropouts at Sherman Indian High School between school years 1969-70 and 1970-71. One hundred sixty-two (162) students dropped out in 1969-70 and 111 in 1970-71. As can be seen, there were 51 fewer dropouts in 1970-71. The data also reveals that 26.5% of the total enrollment of 611 dropped out in 1969-70 compared to 17.4% of the total enrollment of 637 the following school year.

Even though the results of this data are positive and reflect a substantial decrease in dropouts, it is difficult to determine whether the encouraging data is solely attributable to this component, or the recreation component at Sherman which had similar objectives (See Table 39) or whether it is a combined effect of both.

S H E R M A N I N D I A N H I G H S C H O O L

DROP-OUT PREVENTION

Recreation

I. Vital Statistics

A. School Name and Address: Sherman Indian High School
9010 Magnolia Street
Riverside, California 92503

B. Component Cost: $54,200

C. Staffing Pattern: Professional - One art director, and three part-time regular program teachers
Paraprofessional - Six full-time Title I recreational aides, and four part-time arts and crafts aides

D. Number of Students Participating: 450

E. Component Director: Harold Nading

II. Component Objectives

A. To decrease incidents of behavioral problems, drinking and sniffing by one-third as determined by the comparison between incidents in 1969-70 and 1970-71.

B. Reduce drop-out percentage rate by one-half as determined by the comparison between the drop-out rate in 1969-70 and 1970-71.

III. Evaluation

Comparison between the number and percent of student drop-outs, drinking, and glue sniffing incidents in 1969-70 and 1970-71.

IV. Procedures

Arts & Crafts - Teacher aides under the direction of a professional fine arts director were used to work with students who had emotional and/or behavioral problems and who were potential dropouts. Work groups were involved in beadwork, leather crafts, painting, weaving, ceramics, and as many other phases of arts and crafts as possible. These aides were involved on Monday, Tuesday, and Thursday nights and on Saturday and Sunday afternoons.

Native craftsmen were brought to Sherman Indian High School from the five major tribes represented at the school. This was done on a rotating basis. Students were encouraged to cross tribal lines in order to learn about the arts and crafts of other tribes. This was intended to increase skill and pride in native arts and crafts the acquisition of modern techniques.

Six recreation aides devised and implemented activities on a one-to-one, small group basis covering sports, games, hiking, swimming, etc., constantly keeping in mind the necessity to challenge the student who had behavioral problems or who was a potential dropout. These activities involved on and off campus activities.

V. Results

See chart on next page.

Table 39

Comparison Between the Number and Percent of Student Dropouts, Drinking, and Glue Sniffing Incidents in 1969-70 and 1970-71 School Years for Students in Grades 9-12

School Year	Total Enrollment	Dropouts		Number & Student Ratio of Reported Incidents			
		Number	Percent of Total Enrollment	Drinking Incidents	Ratio Per Student	Glue Sniffing Incidents	Ratio Per Student
1969-70	611	162	26.5%	819	1.18	330	.54
1970-71	637	111	17.4%	518	.81	215	.34
Difference (+ or -)		-55	- 9.1%	-301	- .37	-115	- .20

VI. Discussion of Results

Table 39 shows that there were 819 reported incidents of Drinking during the 1969-70 school year resulting in a ratio of 1.18 incidents per student. In school year 1970-71, the ratio was .81 incidents per student. Similar reductions in incidents of Glue Sniffing were also evident. The difference found in comparing the ratio of incidents per student shows a -.37 or a 37% reduction in Drinking and a -.20 or a 20% reduction in Glue Sniffing.

S T E W A R T I N D I A N H I G H S C H O O L

DROPOUT PREVENTION

I. Vital Statistics

A. School Name and Address:	Stewart Indian High School Nevada Agency Stewart, Nevada 89437
B. Component Cost:	$50,000
C. Staffing Pattern:	Professional - One Title I project director, one student enterprise manager and one counselor
D. Number of Students Participating:	60 Female Students
E. Component Operator:	Robert Kinne

II. Component Objectives

A. To improve the attitudes of 60 female students toward self, value of education, teachers, and extra-curricular activities as measured by the FAATE Inventory.

B. To reduce the incidents of dysfunctional behavior among female students as determined by the comparison between incidents in the fall semester (before the project was funded) and the incidents reported during Spring semester (after four months of the project.

III. Procedures

In December, 1970 the Stewart Impact proposal was funded; the operation began the following month. At the outset of the project, 60

girls were selected to comprise the Title I target group. The target group included those girls who, in the opinion of the girls guidance personnel and other students, were the least involved in school activities and most in need of opportunities for positive growth and improved self image. Additionally, the Pupil Personnel Services staff substantiated student referrals in an attempt to identify those girls who exhibited dysfunctional behavior in their relationships with peers and to the boarding school environment. Finally, recommendations and referrals were supplemented with results from the FAATE Inventory administered prior to the initiation of project activities.

The procedures utilized to reach the objectives were varied in the attempt to reach the specific needs of each participating student. For example, a student enterprise program was established to provide opportunities for the girls to: (1) redecorate their own room and dormitory; (2) explore artistic areas not available at Stewart through the initiation of an exchange program with the Institute of American Indian Arts; (3) learn traditional art forms through the implementation of a native artist program which brought artisans from the students' home communities to give instruction in traditional arts and crafts; (4) earn money through a student employment program; (5) receive additional information about high interest topics by the establishment of a student seminar program involving speakers and small group discussions on drugs, sniffing, cosmotology, etc.

From the month of February to the month of May, 1971, Indian women came from the reservations to instruct the girls in traditional Indian arts forms. The girls were taught such things as basket weaving, cradle board making, beading, doll making, etc. They learned these art forms, actually worked on constructing them, and were allowed to keep the work they had completed. A total of 44 target girls worked with the native artists at different times during the year.

A number of opportunities was offered the girls through the Impact Program for individual and group involvement. Guitars were made available to buy or to rent, and guitar lessons were given every week for those who were interested.

A student employment enterprise was also set up for those who needed extra spending money, particularly those who had guitar payments to make. The students worked for $1.50 a[illegible] [illegible] school weekends.

IV. Evaluation

A. January Pre, May Post FAATE Inventory.

B. Comparison between the number and percent of infractions for the Title I and control group from January to May, 1971.

V. Results

See chart on next page.

Table 40

Comparison Between Pre and Post Test Mean Scores on the FAATE Semantic Differential Administered in January and May, 1971 to Female Students in Grades Seven Through Twelve

Test Period	No. of Students Responding	FAATE Semantic Differential Factor Scales				
		Self Concept	Value of Education	Home Attitude Toward School	Attitude Toward Teachers	Attitude Toward Recreation
January Pre Test Mean	47	3.5	2.5	2.0	3.0	3.1
May Post Test Mean	50	2.7	2.1	2.1	2.6	3.3
Amount Gain or Loss (+-)		+ .8	+ .4	- .1	+ .4	- .2

VI. Discussion of Results

A note of explanation is necessary regarding the FAATE Inventory. FAATE stands for Factors Affecting Attitudes Toward Education. There are two scales in the inventory, the Semantic Differential and Likert. Each scale evaluates an individual's perception relative to five criteria: (1) self concept; (2) attitude toward teachers; (3) value of education; (4) home attitude toward school; and (5) recreation. For each criterion it was possible to quantify a student's feeling within a numerical range of 1-7. One (1) was construed to be the most positive response, and seven (7) was the most negative. That is as the values move toward one (1) the attitude being measured is thought to be more positive. Conversely, as a value moves toward seven (7) the attitude is thought to be

more negative. For example, 1.3 indicates a more positive attitude toward any of the aforementioned criteria than does a 2.7 value. In terms of a pre-post comparison, a pre-score value of 3.1 and a post-score value of 3.9 would suggest that a subject's attitude had become more negative. The specific value obtained for a student is a mean score computed from 12 to 17 responses for each of the five factors. This explanation of the FAATE Inventory will apply to many of the affective domain projects unless otherwise noted. As may be noted in the explanation below, a post-test value which is lower than the pre-test mean indicates that a positive attitudinal change has taken place.

The data presented in Table 40 represents pre-post test mea... for the target students. Reviewing the table, one can see that the largest improvement was self concept with a gain of .8. Value of education and attitude toward teacher improved .4. Slight losses are seen in home attitude toward school and attitude toward recreation. Overall the data appears to support the efforts put forth in this project. The gains are quite significant whereas the losses are not.

Table 41

Comparison Between Pre and Post Test Mean Scores on the FAATE Likert Scale Factor Administered in January and May, 1971 to Female Students in Grades Seven Through Twelve

Test Period	No. of Student Responding	FAATE Likert Scale Factor Scores				
		Self Concept	Value of Education	Home Attitude Twrd School	Attitude Toward Teachers	Attitude Toward Recreation
January Pre-Test Mean	47	3.6	3.0	2.8	3.6	3.5
May Post-Test Mean	50	3.3	2.9	2.5	3.2	3.4
Amount of Gain or Loss (+ or -)		+0.3	+0.1	+0.3	+0.4	+0.1

As is mentioned in the explanation of the FAATE Inventory, it contains two scales. The Semantic Differential portion was discussed and presented in the analysis shown in Table 40. This Table, number 41 presents the second segment of the Inventory which is referred to as the Likert Scale. The criteria being assessed are the same, but on the Likert Scale students responded to sets of questions on a strongly agree, agree, disagree, and strongly disagree range. These were quantified on a 1, 3, 5, 7 basis with one (1) again being the most positive, and seven (7) the most negative. Thus, as with the semantic differential scale, a lower post-test value suggests movement in a positive direction relative to any of the five criteria being assessed. The largest gain, .4, can

be seen in the Attitudes Toward Teacher column. Two increases of .3 are observable, i.e., Self Concept and Home Attitude Toward School. A minimal growth of .1 occurred in both Value of Education and Attitude Toward Recreation. From experience with this Inventory, it can be stated that the two scales of the FAATE Inventory tend to measure different aspects of the same criteria. Nevertheless, the instrument can be used to advantage in this type of project because it does provide some baseline data.

Table 42

Comparison Between the Number and Percent of Infractions for the Title I and Control Group from January to May, 1971

Reporting Period	Number of Students		Number & Percent of Infractions by Title I and Control			
			Title I		Control Group	
	Title I	Control	Number	% of Total Infractions	Number	% of Total Infractions
Fall Semester (Before the Project was Initiated)	55	55	44	64%	25	36%
Spring Semester (After the Project had been in Operation Months	55	55	59	39%	90	61%
Difference (+ or -)			+ 15	- 25%	+ 65	+ 25%

In an attempt to find out whether the project was lowering the number of infractions among target students, a random sample of girls was selected to serve as a control group. Records were

checked regarding the number of infractions that took place during the first semester of school. By totaling them and then matching the number of infractions by girls in the target group to those by girls in the control group it was possible to compute what percentage of infractions were attributable to each group. The analysis of this first semester data and an extension through the project period, January to May, 1971, is compared in this table. The table indicates that the 55 target students and the 55 control students accounted for a total of 69 infractions during the first semester, 44 + 25. Comparing percentages, the Title I students accounted for 64% of the infractions and the control group, 36%. During the project period, January to May, 1971, 149 infractions occurred, 59 + 90. By percentage it is seen that the Title I group accounted for 39% of the infractions and the control group 61%. It can be concluded from this data that during the first semester those students who were later to be involved in the Title I project had been responsible for infractions at nearly a two to one ratio in comparison to an equal number of randomly selected control students. After their involvement in the Title I program this situation came close to reversing itself. It appears that by concentrating on a small number of students it is possible to turn around a potentially negative situation.

F O R T A P A C H E A G E N C Y S C H O O L S

Theodore Roosevelt Boarding School

DROPOUT PREVENTION

I. Vital Statistics

A. School Name and Address: Theodore Roosevelt Boarding School
P.O. Box 567
Fort Apache, Arizona 85926

B. Component Cost: $13,535

C. Staffing Pattern: Professional - One part-time regular program counselor
Paraprofessional - One full-time Title I aide

D. Number of Students Participating: 235

E. Component Operator: Samuel Johnson

II. Component Objectives

To significantly improve 235 students' attitude toward school, staff, and each other as measured by the FAATE Inventory and an analysis of AWOL, truancy, and behavioral incidents records.

III. Evaluation

A. Pre-Post FAATE Inventory

B. Comparison of AWOL's, truancies, and incidents of dysfunctional behavior between school years 1969-70 and 1970-71.

IV. Procedures

A student recreational center was established and operated by the students with minimum adult guidance. A director was hired to

advise the students on the general operation of the center and to help order supplies as dictated by the students' need. The Student Council, one advisor each from the teaching and dormitory staff selected by the Student Council, and the Director were the decision making committee for the Student Center. This committee hired two students per hour on a rotation basis as aides to assist the Director in the operation of the Center. The Student Center was operated after school hours and on weekends.

V. Results

Table 43

Comparison Between Number of Reported AWOL, Truancy, and Other Behavioral Incidents for Students in Grades One Through Eight at Theodore Roosevelt Boarding School in 1969-70 and 1970-71 School Years

School Year	Number & Percent of Reported Incidents					
	AWOL's		Truancies		Other Behavioral Infractions	
	N*	P**	N	P	N	P
1969-70	6		10		127	
1970-71	12		4		135	
Change (+ or -)	+ 6	+100%	-6	-60%	+ 8	+ 6. %

N* = Number of Incidents

P** = Percent

VI. Discussion of Results

Table 43 contains three categories, all of which show numbers and percents of measurable incidents of behavioral infractions. Readers not familiar with these categorical names commonly used in Bureau of Indian Affairs boarding schools will find the following explanations helpful: AWOL - absence from class, dormitory and campus without permission or knowledge of school staff; TRUANCY - unexcused absence from academic classes; BEHAVIORAL INFRACTIONS - fighting, drinking, sniffing, stealing, vandalism, etc.

This table depicts an increase in the reported incidences of AWOL's and other behavioral infractions, while incidents of truancies show a decrease. There is some question as to whether school procedures for the reporting of incidents were consistent for the two year span with many instances possibly having gone unnoticed or unreported. Even if reporting procedures did remain constant, it still cannot be determined whether or not the degree of change was caused by the student center. The inherent weakness of the evaluation procedures make it at least a questionable measure of the objectives.

The data in Table 44 is reported by mean scores by grade on the FAATE Inventory. See page 129 for explanation of the FAATE Inventory. By analyzing the four factors, it can be seen that Attitude Toward Teachers shows a higher degree of change than the other factors, sixth grade, +0.6; seventh grade, +0.4; eighth grade, -0.2.

Table 44

Comparison Between Pre and Post Test Mean Scores on the FAATE Semantic Differential Inventory Administered in October, 1970 and May, 1971 to Students Participating in the Project by Grade Level

Test Period	Number of Students Responding by Grade Level			FAATE Semantic Differential Factor Scores by Grade											
				Self Concept			Value of Education			Home Attitude Toward School			Attitude Toward Teachers		
	6th	7th	8th	6th	7th	8th	6th	7th	8th	6th	7th	8th	6th	7th	8th
September Pre-Test Mean Scores	24	23	23	2.6	2.5	2.5	1.9	2.0	1.6	1.9	1.9	1.4	2.2	2.2	1.8
May Pre-Test Mean Scores	24	23	23	2.7	2.4	2.6	1.9	2.0	1.8	1.6	1.5	1.6	1.6	1.8	2.0
Amt Gain or Loss (+ or -)				-0.1	+0.1	-0.1			-0.2	+0.3	+0.4	-0.2	+0.6	+0.4	-0.2

Value of Education for the sixth grade changed the least, sixth grade and seventh grade, no change; eighth grade, -0.2.

Home Attitude Toward Education sh[illegible]he second most prominent changes, followed by Self Concept. T[illegible]e lar[illegible]gest gains occurred in the Attitude Toward Teachers factor, and [illegible]he [illegible]alue [illegible]f Education factor evidenced the most prominant losses. [illegible]rade[illegible] the eighth grade showed losses in all factors; the sevent[illegible] grade gained in three while remaining stable in one; and the s[illegible]th g[illegible]ade gained in two, lost in one, and showed no change in the [illegible]ther. The lack of consistency between gains and losses by factors and the same noted inconsistencies among grades makes it difficult to draw valid conclusions from this data.

H O P I A G E N C Y S C H O O L S

DROPOUT PREVENTION

I. Vital Statistics

A. School Name and Address: Hopi Agency Schools
Hopi Agency
Keams Canyon, Arizona 86034

B. Component Cost: $26,039.00

C. Staffing Pattern: Paraprofessional - Five Title I Community Counselors

D. Number of Students Participating: 80

E. Component Operator: Ernest E. Rice

II. Component Objectives

A. To improve the attitudes of 80 elementary students toward school, parents, family, peers, teachers, and self as measured by pre-post Personality Inventory.

B. To increase attendance of 80 elementary students as measured by a comparison of attendance records between 1969-70 and 1970-71.

III. Evaluation

A. Pre-Post Personality Inventories

B. Comparison of Attendance records between 1969-70 and 1970-71.

IV. Procedures

In order to accomplish the above objectives, Special Aides for Educationally Troubled Youth (hereafter referred to as SAFETY), were selected from the Hopi villages to work in five Hopi Agency schools with a total of approximately 80 students. The SAFETY employees

worked with a total of approximately 80 students. SAFETY employees devoted their entire time to dealing with the children whose attitudes and behavior patterns indicated that they needed help to find greater satisfaction in the school, home, and community setting so that attending school would be satisfying and achievement would be consistent with learning potentials.

The program was designed to provide "friends" who were able to identify closely with the children's problems. It was necessary that they have an understanding of the home, community, and school, and be able to gain the confidence of the children. The aide provided group services and individual counsel to the students in such areas as: (1) orientation to school and present life situations; (2) improvement in social skills; (3) conduct; and (4) general citizenship.

The aides provided adult leadership to the children in school student government, recreation, field trips, and other extracurricular activities in order to encourage and promote involvement of the target group.

V. Results (No evaluation data was reported)

VI. Discussion of Results

Because the evaluation is not reported, no conclusions can be drawn.

III

V O C A T I O N A L A W A R E N E S S

HIGH SCHOOLS

Stewart Indian High School

ELEMENTARY SCHOOLS

None

S T E W A R T I N D I A N H I G H S C H O O L

VOCATIONAL AWARENESS

I. Vital Statistics

A. School Name and Address: Stewart Indian High School
Nevada Agency
Stewart, Nevada 89437

B. Component Cost: $25,151

C. Staffing Pattern: Professional - One full-time
Title I counselor
Paraprofessional - One full-time
Title I aide

D. Number of Students Participating: 40 (20 sophomores, 20 seniors)

E. Component Operator: Be Herrera

II. Component Objectives

A. The 40 students involved will gain specific knowledge regarding vocations, i.e., knowledge of a wide range of occupations, job requirements, advantages and limitations, salary range, work hazards and opportunities, etc., as measured by pre-post teacher-made tests of vocational knowledge.

B. The 40 students will have an increased understanding of their vocational interests, needs, and strengths, as measured by a pre-post test of vocational interest.

C. The 40 students will have a functional knowledge of successful techniques involved in job interviewing, completing job appli-

cations and income tax forms as measured by a pre-post teacher-made tests.

III. Evaluation

Pre-Post Vocational Guidance Inventory, student questionnaires, and staff questionnaires.

IV. Procedures

A target group of 20 sophomores and 20 seniors was established through a process of random selection. The remainder of the sophomores and seniors served as a control group. It should be noted that all students were equally in need of instruction but because of lack of funds, personnel, etc. only 40 students could be served. The target group spent approximately 15 hours per week for the entire school year in the following activities: (1) series of field trips and speakers, each of which presented to the students a successful Indian adult model; (2) visitations to various job sites which exposed the students to various occupations and presented insight into their complexities; (3) instruction in the skills of job application job interviewing, personal banking and budget habits, income tax, etc.; (4) group classroom discussions to offer follow-up and to build continuity into the varied activities.

V. Results

See chart on next page.

Table 45

Mid-Post Vocational Guidance Program Quarterly Evaluation Comparison (December & May)
Number Taking (December) - 20; (May) - 18* for Target Seniors

Item	A Great Deal		Quite A Bit		Something		Very Little		No Answer	
	Mid	Post	Mid	Post	Mid	Post	Mid	Post	Mid	Post
1. How to choose a job	7	9	11	9	1	0	1	0	0	0
2. Where to go to find out about jobs	5	7	12	10	2	1	1	0	0	0
3. Opportunity to talk with people about jobs	6	4	11	11	2	2	1	0	0	0
4. How to fill out job applications	4	10	12	4	3	4	0	0	0	0
5. What good work habits are	5	3	8	15	5	0	2	0	0	0
6. Different kind of job opportunities	3	8	14	8	1	1	1	1	1	0
7. My own ability to do a job	4	6	13	9	2	3	0	1	1	0
8. How some Indians have succeeded in their work	10	9	7	7	3	2	0	1	0	0
9. Opportunities for getting job training	4	8	15	8	0	2	1	1	0	0
10. Good and bad aspects of certain jobs	2	6	11	9	5	3	2	1	0	0
Totals	51	70	114	90	24	18	9	5	2	0
Percentages of Groups	25%	39%	57%	50%	12%	10%	4.5%	2.8%	1.0%	0

* At the beginning of the project in September, 1970, there were 22 target seniors. During October, two dropped to go to public school; one did not return from the Christmas holiday and one transferred to Sherman Indian High School in March because of problems in the dormitory.

VI. Discussion of Results

Senior target students were asked to respond on a mid-post basis to ten questions which were directly related to the objectives of the Stewart Indian High School Vocational Guidance project. Each item had four possible selections. The frequency totals are presented for each possibility on the mid-post basis thus allowing direct comparisons. Frequency totals for all ten items were computed and than converted to percentages. These values are found at the bottom of the table. The reader may observe that 82% of the seniors, 25% + 57%, felt they had learned "a great deal" or "quite a bit" on the mid-year evaluation. This percentage had increased to 89%, 39% + 50%, by the end of the year. Only 2.8% of the group thought they had learned "very little" at the completion of the project. Students are well known for their tendency to be exceptionally critical. On the basis of the data taken from questions directly related to component objectives it would appear that students gained a great deal from this activity.

Table 46

Mid-Post Vocational Guidance Quarterly Evaluation Comparisons (December & May)
Number Taking (December) - 21; (May) - 17* for Target Sophomores

Item	A Great Deal		Quite A Bit		Something		Very Little		No Answer	
	Mid	Post	Mid	Post	Mid	Post	Mid	Post	Mid	Post
1. How to choose a job	2	5	13	10	4	2	2	0	0	0
2. Where to go to find out about jobs	5	6	8	5	3	2	2	0	0	0
3. Opportunity to talk with people about jobs	9	6	8	6	2	4	2	0	0	1
4. How to fill out job applications	4	6	7	7	4	4	5	0	0	0
5. What good work habits are	8	4	10	10	2	3	1	0	0	0
6. Different kind of job opportunities	8	8	6	2	4	4	2	1	0	2
7. My own ability to do a job	3	5	10	9	7	3	1	0	0	0
8. How some Indians have succeeded in their work	7	8	10	7	2	2	2	0	0	0
9. Opportunities for getting job training	9	6	7	9	5	2	1	0	0	0
10. Good and bad aspects of certain jobs	6	3	8	11	3	3	4	0	0	0
Total	61	57	87	76	36	29	22	1	0	3
Percentages of Groups	29%	34%	41%	44%	17%	17%	11%	1%	0	2%

* At the beginning of the project in September, 1970, there were 22 target sophomores. One dropped in October to return to public school; one did not return from Christmas holiday; and three were sent home as behavioral problems by the school administration between February and April.

Discussion of Results

Sophomore target students responded to the same questionnaire discussed in Table 46. From the data reported, a large portion of the students believed they had learned "a great deal" or "quite a bit" at the mid-term evaluation. By adding 29% and 41% it is observed that 70% felt this way. On the post-test the percentage had increased to 78%. Only 1% thought they had learned "very little." From the data it may be reasonably concluded that considerable growth occurred.

By comparing the previous table, number 45 with this one, it is seen that senior target students felt they had gained more than did the sophomore group. Possibly this relationship is due to the fact that seniors would be expected to be somewhat farther along in terms of vocational selection than would sophomores. Thus, the relevancy of vocational planning had a more direct bearing on them than it would to the younger students.

At the completion of the project a questionnaire was given to three groups. Teachers who had target students throughout the course of the year, dormitory aides who dealt with the students in their respective living situations, and the students themselves responded on a simple yes-no system to items related to attendance, self concept, participation in school activities, appearance, and vocational awareness. Table 47 and 48 present the tabulation of results from this questionnaire by each of the three groups. A copy of the questionnaire is on the next page.

Questionnaire

1. Has this student's attitude toward classwork and education improved:

	Yes	No
a. Attendance	___	___
b. Tardiness	___	___
c. Completion of assignments	___	___

2. Has the student's self-confidence improved?

   a. Yes ___
   b. No ___

3. Has this student discussed his/her future plans at all?

   a. Yes ___
   b. No ___

4. Does this student seem to know more about opportunities for his/her future?

   a. Yes ___
   b. No ___

5. Has this student's interest in participating in dorm activities improved?

   a. Yes ___
   b. No ___

6. Have you observed an increased interest in appearance on the part of the student?

   a. Yes ___
   b. No ___

7. Do you think this student has benefitted from participation in the Vocational Guidance Project?

   a. Yes ___
   b. No ___

8. Please list any comments concerning this student which you think would be helpful in evaluating his/her success.

_____

_____

_____

_____

_____ _____

Name of Evaluator Title

_____ _____

Name of Student Grade

_____

Date

Thank you for your cooperation.

Table 47

Vocational Guidance Inventory Administered in May, 1971
to Target Senior Students

Question		Teacher		Dormitory Aide		Student Self Evaluation	
		Yes	No	Yes	No	Yes	No
#1	a.	13	5	18	0	14	4
	b.	14	4	17	1	14	4
	c.	13	5	17	1	13	5
#2	a.	13		17		17	
	b.	5		1		1	
#3	a.	12		14		18	
	b.	6		4		0	
#4	a.	17		18		17	
	b.	1		0		1	
#5	a.	Not		16		17	
	b.	Aware		2		1	
#6	a.	12		18		15	
	b.	6		0		3	
#7	a.	15		18		18	
	b.	3		0		0	
#8 Comments:							
Positive		14		17		10	
Negative		4		1		0	
No Comment		0		0		8	

Discussion of Results

Question 1

A. The teacher evaluation indicated that 13 of the 18 seniors had improved in attendance; the dormitory aides felt all had improved. Only 4 students indicated that they felt their attendance had not improved.

B. The teacher indicated that 14 target seniors had improved tardiness records; the dormitory aides felt that about 17 students had improved. One student felt he had not improved.

C. The teacher felt 13 had improved their completion of assignments; the dormitory aides felt 17 had improved; and 5 students felt they had not improved.

Question 2

Concerning improvement of self confidence, the teacher felt 13 out of 18 had improved while the dorm aides felt 17 had improved and the students individually felt all but one of them had improved.

Question 3

In discussing seniors' future plans, the teacher indicated that 12 students had discussed plans with her; the dorm aides said 14 had discussed plans with them and the seniors said they had all discussed their plans.

Question 4

In a indication of student knowledge of their opportunities for the future, the teacher indicated 17 were aware of opportunities; the dormitory aides felt all 18 were; and the students indicated all except one.

Question 5

The teacher was not aware of the student interest in dorm activities but the dorm aides felt 1y of the 18 had increased parti-

cipation and 17 of the students felt they had increased participation.

Question 6

Concerning increased interest in appearance, the teacher felt 12 had increased interest; the dorm aides felt everyone had improved; and the students felt 15 had improved.

Question 7

To evaluate the amount of benefit senior target students had received from participating in the Vocational Guidance Program, the teacher indicated that 15 had benefitted; the dorm aides felt everyone had benefitted; and the students all indicated they thought they had benefitted.

Question 8

Comments listed concerning student success ranged from a description of individual student plans to student indication that more students should participate in a Vocational Guidance Program. The teacher gave positive comments concerning 14 students and their success; the dorm aides were positive concerning the participation and success of 17 students; and 10 students wrote comments concerning their participation in the program. (all were favorable)

The question by question analysis suggests that basic agreement among the three groups existed. Substantial growth was reflected.

Table 48

Vocational Guidance Inventory Administered in May, 197_
to Target Sophomore Students

Question		Teacher		Dormitory Aide		Student Self-Evaluation	
		Yes	No	Yes	No	Yes	No
#1	a.	10	7	14	3	17	0
	b.	12	5	14	3	17	0
	c.	13	4	14	3	16	1
#2	a.	17		14		17	
	b.	0		3		0	
#3	a.	11		4		13	
	b.	6		13		4	
#4	a.	11		9		15	
	b.	0		6		2	
	don't know	6		2		0	
#5	a.	0		9		16	
	b.	0		7		1	
	don't know	17		1		0	
#6	a.	14		12		16	
	b.	3		5		0	
#7	a.	17		13		17	
	b.	0		4		0	
#8	Comments:						
	Positive	5		13		9	
	Negative	0		4		0	
	No Comment	12		0		8	

Discussion of Results for Sophomores

Question #1

The teacher evaluation indicates that 10 of the 17 sophomores have improved in attendance; 12 have improved in tardiness; and 13 have improved in completing their assignments. The dormitory aides' evaluations indicated that 14 of the 17 had improved in attendance, tardiness, and completion of assignments. The students felt they had all improved in these areas except for one who felt he hadn't improved in assignment completion.

Question #2

Concerning student self-confidence, the teacher felt all 17 had improved; the dorm aides felt 14 had improved; and the students felt they had all improved.

Question #3

In discussion of future plans, the teacher indicated that 11 students had discussed their futures with her; only 4 students had discussed their futures with dorm personnel; and 13 of the students felt they had discussed their future.

Question #4

In indicating student knowledge of opportunities for his or her future the teacher did not know about 6 of her students although she agreed that 11 students were knowledgeable in this area. The dorm personnel marked 9 students as knowledgeable, 6 as

:t knowing and were unaware of the extent of the knowledge of students. Fifteen students felt they knew of opportunities.

Question #5

Student interest in participating in dorm activities was unknown to the teacher; the dorm personnel felt 9 had increased interest, had not and 1 student's interest was unknown; 16 students felt their interest had increased while 1 felt his had not.

Question #6

In measuring increased interest in appearance, the teacher felt 14 had improved; the dorm personnel felt 12 had improved; and the students felt that 16 had improved.

Question #7

Reaction to students benefitting from involvement in the Vocational Guidance Program included the teacher who indicated that all 17 students benefitted; the dorm aides who felt 13 benefitted; and the students all indicated they thought they had benefitted.

Question #8

Comments concerning student success ranged from student comments in which they stated they learned a great deal to the dorm comments which stated that it was generally felt that students who participated had derived a lot of experience from the project. Negative comments were a lack of student interest in discussing their problems.

In terms of the data it appears that sophomore students showed positive growth during their experiences with the vocational guidance project. Again, the sophomore group did not apparently gain as much as seniors and may be attributed to their lesser degree of vocational awareness.

Note: Data from the Vocational Guidance Inventory is available from the school but its length makes it prohibitive to include in this report.

IV

"OTHER" - AFFECTIVE DOMAIN

HIGH SCHOOLS

Phoenix Indian High School
- a. Cosmotology
- b. Reservation Visitation

Sherman Indian High School
- a. Off-Campus Living Experience
- b. Driver's Training

ELEMENTARY SCHOOLS

Fort Apache Agency Schools
Hopi Agency Schools
Papago Agency Schools
Pima Agency Schools
Salt River Day School

P H O E N I X I N D I A N H I G H S C H O O L

"OTHER" - Cosmotology

I. Vital Statistics

A. School Name and Address: Phoenix Indian High School
P.O. Box 7188
Phoenix, Arizona 85011

B. Component Cost: $5,556

C. Staffing Pattern: Professional - One full-time
Title I cosmotologist

D. Number of Students Participating: 100

E. Project Operator: Alice Montana

II. Component Objectives

To increase the sense of personal pride in 100 students through personal grooming as measured by a grooming and hygiene questionnaire.

III. Evaluation

Pre-Post Grooming and Hygiene Questionnaire

IV. Procedures

A qualified, licensed Cosmotologist was employed as an instructor. The instructor arranged for the students to become aware of and practice the methods and techniques used in proper personal hygiene and daily health care. Supplies were purchased that stimulated curiosity and encouraged proficiency in proper care of the skin, hands, and hair. Approximately 100 students attended five one-hour classes a week for 36 weeks.

V. Results

Table 49

Student Responses to Grooming and Hygiene Questionnaire

Question	Response Categories in Percentages		
	Same	Improved	Excellent
My General Appearance is	33	67	
My Figure is	45	55	
My Hair Texture is	12	79	9
My Hair Style is	45	55	
My Nails are	22	48	30
My Posture is	9	85	30
My Lips are	72	28	
My Skin is	10	86	4
My Walk is	23	77	

VI. Discussion of Results

Table 49 represents the analysis of responses by percentages tabulated for the students who took part in the project. As can be seen, the variables included in this self evaluative questionnaire relate directly to various kinds of physical or personal characteristics. As can be observed the students felt that positive growth had occurred in all areas.

P H O E N I X I N D I A N H I G H S C H O O L

RESERVATION VISITATION

I. Vital Statistics

A. School Name and Address: Phoenix Indian High School
P.O. Box 7188
Phoenix, Arizona 85011

B. Component Cost: $5,000

C. Staffing Pattern: Representative Regular Program personnel

D. Number of Students Participating: N/A

E. Component Operator: Miles Bollinger

II. Component Objectives

To improve the student's attitude toward school and education.

To disseminate information to parents on the reservation.

III. Evaluation N/A

IV. Procedures

Teachers, guidance personnel, and supervisors visited the reservation homes of the students and conferred directly with the parents concerning the students' welfare and educational needs. There were three teams of two which visited the Colorado River, Peach Springs, and Papago Reservations, and Supai Day School.

V. Results

All visits to reservations were conducted.

VI. Discussion of Results N/A

S H E R M A N I N D I A N H I G H S C H O O L

"OTHER" - Off-Campus Living

I. Vital Statistics

A. School Name and Address: Sherman Indian High School
9010 Magnolia Street
Riverside, California 92503

B. Component Cost: $16,112

C. Staffing Pattern: Professional - One part-time
Regular Program teacher
Paraprofessional - Two full-time
Title I aides

D. Number of Students Participating: 180

E. Component Operator: Lillie Moore

II. Component Objectives

A. To prepare 180 students to effectively live in apartments in harmony with self and others as measured by questionnaires and interviews.

B. To increase 180 students' self-confidence about their own culture while feeling competent to deal with "live in" situations in the mainstream of society as measured by his ability to get along with other people of other ethnic backgrounds.

III. Evaluation

Pre-Post Student Opinion Questionnaire of Off-Campus Living.

IV. Procedures

One hundred eighty (180) senior students were involved in the program. They took turns living in apartments on a two-week alter-

nating basis. Some students were then hired as teacher/aides to assist in instruction, and all students were responsible for taking care of their own living affairs, living within a budget, and preparing their own food. Students had to "check in" and "check out" of the apartment through the Home Economic Office. Students were given an allowance once per week and were expected to pay their bills to the bank on the day they received their second week's allowance.

V. Results

Table 50

Senior Student Questionnaire Responses to Living Off-Campus After Spending Two Weeks Living in an Apartment by Percent

Questionnaire Items	Questionnaire Variables by Percent			
	% Liked Very Much	Percent Liked	Percent Disliked	% Disliked Very Much
1. Living off-campus	75%	25%	%	%
2. Living in an apartment	80	20		
3. Neighbor in apartment	30	35	20	15
4. Visiting neighbors	20	35	30	15
5. Budgeting	40	40	15	5
6. Planning Menu	40	40	15	5
7. Living with a strict budget	20	15	65	
8. Shopping for food	75	25		
9. Preparing your own meals	65	15	20	
10. Bringing lunch to school	20	55	10	15
11. Being on time for school	20	30	20	20
12. Getting up when the alarm rings	30	10	40	20
13. Riding bus to school	40	35	10	15
14. Living alone	60	15	20	
15. Assuming own responsibilities	60	25	10	5
16. Doing the laundry	35	45	15	5
17. Cleaning kitchen after each meal	50	30	20	
18. Keeping the apartment clean	45	40	10	5
19. Freedom to make own choices	65	35		
20. Sharing a room	55	35	5	5
21. Choosing own leisure time	55	45		
22. Location of apartment	40	35	20	5
23 Paying bills promptly	25	50	15	10
24. Observing apartment regulations	25	75		
25. Playing radio or record player moderately	40	60		

VI. Discussion of Results

A total number of 180 students participated in the off-campus living experiment at Sherman Indian High School. In order to assess the project's success a questionnaire was administered at the conclusion of each cycle. The rest of the inventory compiled by percentage is presented in Table 50. By inspecting the percentages which indicate a degree of dislike, one finds that about 25% did not care for some of the responsibilities included in this activity. Several categories exceeded this 25% figure. For example, item #4 shows that 45% of the target students did not favorably respond to visiting their neighbors. Question #7 suggests that over half of the participants, 65%, did not like living within a strict budget. Also, question #12 reveals that students did not like to get up at specific times. Questions 1, 2, 8, 19, 21, 24, and 25 have 100% responses within either the liked very much or liked categories. The negative reactions indicated by questions 4, 7, and 12 are not necessarily unexpected. Students have not generally had direct experience with budgets, time deadlines, or neighbors who are non-Indian. The positive responses would suggest that students have demonstrated growth toward the stated objectives. However, it should also be noted that behavioral change is not necessarily a correlate of attitudinal disposition.

Table 51

180 Senior Student Questionnaire Responses to Expressed Concern Over Living in an Apartment Before Participating in the Off-Campus Living Project and After Spending Two Weeks in an Apartment by Percent

Questionnaire Items	Off-Campus Living Questionnaire Valuables			
	Percent Concerned		Percent Not Concerned	
	Before	After	Before	After
Living Off-Campus	45	39	55	61
Living in an Apartment	55	35	45	55
City Living	60	53	40	47
Sharing a Room	45	33	55	67
Living Alone	40	39	60	61
Living with Non-Indians	25	35	75	64
Accepted by Non-Indians	35	40	65	50
Loneliness	35	36	65	64
Riding the Bus	50	30	50	70
Church	45	30	55	70
Recreation	45	39	55	61
Amusement	50	45	50	56
School	70	59	30	41
Leisure Times	55	47	47	53
Handling of Money	95	83	15	17
Budgeting	75	72	25	28
Shopping for Food	65	63	35	37
Preparation of Food	55	48	45	42
Preparation of Native Foods	55	67	45	33
Being on Time for School	65	68	35	32
Being on Time for Job	70	67	30	33
Drinking	40	39	60	61

Discussion of Results

Table 51 reports the results by percentages of a questionnaire given before and after each two week apartment live in experience. Issues which were thought to be of concern were included on the inventory. Students reacted in terms of their concern or lack of

concern. Inspection of the data reveals several interesting trends. For example, students became more concerned about living among and being accepted by non-Indians after their experiences. Also, even though fewer students were concerned about handling money on the post-analysis, it remained a strong issue with 83% of the group. Budgeting showed a parallel movement. In general, students were not as concerned about the complexities of living off campus after their time in the apartments. And, the percentage of students who indicated "no concern" tended to increase showing a reinforcement of their original perception. Unfortunately, a questionnaire of this type does not lend itself to realistic evaluation. One does not know for instance whether "concern" exists because of fear, lack of experience, or if it is a misperception by the student. Conversely, it is impossible to know whether "not concerned" is an indication of skill in that area or again an unrealistic perception. Thus, the percentage differences on a pre-post basis are difficult to assign directionality, i.e., did gains or losses actually occur.

S H E R M A N I N D I A N H I G H S C H O O

DRIVER EDUCATION

I. Vital Statistics

A. School Name and Address: Sherman Indian High School
9010 Magnolia Street
Riverside, California 92503

B. Component Cost: $4,500

C. Staffing Pattern: Professional - Two part-time Regular Program teachers
Paraprofessional - One full-time Title I aides

D. Number of Students Participating: 86

E. Component Operator: Harold B. Nading

II. Component Objectives

To improve the driving habits, attitudes and skills of 86 sophomore students as measured by Attitude Tests and Driver Simulator Tests.

III. Evaluation

A. Pre-Post California State Simulator Test

B. Pre-Post Student Driver Attitude Test

IV. Procedures

Eighty-six (86) target students participated in the activity. They trained on a driver simulator which provided opportunities to develop sound driving habits, attitudes, and skills. They also received experience and instruction through driving an automobile on a special course located on the school campus.

V. Results

Table 52

Comparison Between Pre and Post Test Responses in Percentages On the California Attitudinal and Simulator Test

Test Section	% of Correct Responses		Amt Gain or Loss (+ or -)
	Pre	Post	
Attitudinal Test	65%	90%	+ 25%
California State Simulator Test	60%	95%	+ 25%

VI. Discussion of Results

Comparing pre and post test results, the students had 25 percent more correct responses on both the attitudinal and 35 percent on the simulator test.

F O R T A P A C H E A G E N C Y S C H O O L S

"OTHER" - Tribal Education Coordinator

I. Vital Statistics

A. School Name and Address: Fort Apache Agency Schools
Fort Apache Agency
Whiteriver, Arizona 85941

B. Component Cost: $28,438

C. Staffing Pattern: Professional - One Title I Tribal Education Coordinator
Paraprofessional - One secretary

D. Number of Students Participating: N/A

E. Component Operator: Wesley Bonito
Tribal Education Coordinator

II. Component Objectives

To increase White Mountain Apache students' motivation, improve the holding power of the school, classroom attendance, and the number of students involved in higher education programs.

III. Evaluation

A. Comparison of dropout rates among White Mountain Apache students' in 1969-70 and 1970-71.

B. Comparison of attendance in post-secondary institutions among White Mountain Apache students in 1969-70 and 1970-71.

IV. Procedures

The role of the Tribal Education Coordinator was to act as liaison among the home, school, tribal education committe, and students.

The Tribal Education Coordinator attended all Title I Phoenix Area-wide meetings and subsequently served as a disseminator of information to the tribal education committee, community people, and headed the parent committees for the planning of Fiscal 1972 Title I projects. He accomplished this by contacting parents for the following reasons: (1) absentees; (2) AWOL's & conduct reports; (3) boarding school application and youth programs (4) community meetings; (5) transportation and messages to parents; (6) Title I evaluation and planning meetings, both local and area-wide. Additionally, students were contacted in their homes and at the schools for the purposes of (1) boarding school application and job placement for summer; (2) education visitation in general; (3) education conferences four times a year; and (4) dissemination of information to parents, students, and the tribal council members.

V. Results

Table 53

Comparison Between Dropout Rates of White Mountain Apache in Phoenix Area Off-Reservation Boarding Schools in 1969-70 and 1970-71

School	Dropout Rate		Difference
	1969-70	1970-71	+ or -
Phoenix Indian	5%	5%	
Sherman Indian	.05%	.05%	
Stewart Indian	0	0	

VI. Discussion of Results

Table 53 shows the dropout percentage rate among White Mountain Apache students on a two-year comparison basis. Three schools are shown, Phoenix Indian High School, Sherman Indian High School, and Stewart Indian High School. As can be seen, no change took place at any of the three schools.

Table 54

Comparison Between Number of Apache Students Attending Post-Secondary Institutions during 1969-70 and 1970-71

Post Secondary School	Attendance		
	1969-70	1970-71	Gain or Loss (+ -)
Vocational Training	23	22	- 1
College	65	48	-17

VI. Discussion of Results

Post-secondary attendance is reported in Table 54 on a two-year comparison basis. Vocational training is differentiated from regular college attendance. A drop is observable in both categories.

H O P I A G E N C Y S C H O O L S

"OTHER" - Tribal Education Coordinator

I. Vital Statistics

A. School Name and Address: Hopi Agency Schools
Hopi Agency
Keams Canyon, Arizona

B. Component Cost: $21,824

C. Staffing Pattern: Professional - One Title I
Tribal Education Coordinator
Paraprofessional - One Title I
Secretary

D. Number of Students Participating: N/A

E. Component Operator: Alexander Ami
Tribal Education Coordinator

II. Component Objectives

To improve attendance of Hopi students, to increase post-secondary attendance, and to serve as an active link between the school and the community.

III. Evaluation

A. Comparison of dropout rates among Hopi students in 1969-70 and 1970-71.

B. Comparison of attendance in post-secondary institutions among Hopi students in 1969-70 and 1970-71.

IV. Procedures

The duties of the Tribal Education Coordinator included: (1) to function as a liaison between the school and the home; (2) to visit

schools where Hopi children attended, and (3) to contact parents for Title I planning, community meetings, Tribal Council meetings, workshops, conferences, and Inter-Tribal School Board meetings.

V. Results

Table 55

Comparison Between Dropout Rates of Hopi Students in Phoenix Area Off-Reservation Boarding Schools in 1969-70 and 1970-71

High School	Dropout Rate		
	1969-70	1970-71	Difference (+ or -)
Phoenix Indian High	10-12%	8-10%	- 2%
Sherman Indian High	8-10%	5-6%	- 3-4%
Stewart Indian High	5%	3%	- 2%

VI. Discussion of Results

Dropouts among Hopi students at the three off-reservation high schools within the Phoenix Area on a two-year basis are presented in Table 55. The comparison shows that a decrease in dropout rate took place in all three schools, the largest being 3-4% at Sherman Indian High School.

Table 56

Comparison Between Number of Hopi Students
Attending Post-Secondary Institutions
During 1969-70 and 1970-71

Post Secondary School	Attendance		
	1969-70	1970-71	Number of Gain or Loss (+ or -)
Vocational Training	70	75	+ 5
College	125	135	+10

Discussion of Results

The Post-secondary attendance pattern among Hopi students is seen in Table 56. Again, as with other Tribal Education Coordinators, the comparison is made on a two-year basis between vocational training and college attendance. The enrollment figures indicate that 75 students were taking some type of vocational training and that 135 students were in institutions of higher learning during the 70-71 school year. This shows an increase for both categories compared to the 1969-70 school year.

P A P A G O A G E N C Y S C H O O L S

"OTHER" - Tribal Education Coordinator

I. Vital Statistics

A. School Name and Address: Papago Agency Schools
Sells, Arizona 85634

B. Component Cost: $34,636

C. Staffing Pattern: Professional - One Title I
Tribal Education Coordinator
Paraprofessional - One Title I
Secretary

D. Number of Students Participating: N/A

E. Component Operator: Josiah Moore
Tribal Education Coordinator

Note: No procedural reports or evaluations were reported from the Tribal Education Coordinator

P I M A A G E N C Y S C H O O L S

"OTHER" - Tribal Education Coordinator

I. Vital Statistics

A. School Name and Address: Pima Agency Schools
Pima Agency
Sacaton, Arizona 85247

B. Component Cost: $20,727

C. Staffing Pattern: Professional - One Title I
Tribal Education Coordinator
Paraprofessional - One Title I
Clerk-typist

D. Number of Students Participating: N/A

E. Component Operator: Dana Norris
Replaced by: Peggy Jackson
Tribal Education Coordinator

II. Component Objectives

To improve attendance of Pima students, to increase post-secondary attendance, and to serve as an active link between the school and the community.

III. Evaluation

A. Comparison of dropout rates among Pima students in 1969-70 and 1970-71.

B. Comparison of attendance in post-secondary institutions among Pima students in 1969-70 and 1970-71.

IV. Procedures

This component involved a tribal education coordinator who was responsible for working directly with students in the roles implied

by the objectives mentioned above and to act as liaison between the school and the home.

The coordinators achieved this by contacting parents during the year for the purposes of: (1) parent-community involvement in planning of Title I projects and other projects; (2) preventing absenteeism, dropouts, and anti-social behavior of their children, and (3) and solving other home oriented problems.

The coordinators also visited students in their homes and at school to extend their educational aspirations, deal with absenteeism, dropouts, and/or anti-social behavior, or for socio-economic reasons. Additionally, visits were made to the three off-reservation Indian schools and to workshops.

V. Results

Table 57

Comparison Between Dropout Rates of Gila River Pima Students in Phoenix Area Off-Reservation Boarding Schools in 1969-70 and 1970-71

School	Dropout Rate		
	1969-70	1970-71	Difference (+ or -)
Gila Crossing Day	2%	0	- 2%
Phoenix Indian High	13%	9%	- 4%
Sherman Indian High	7%	3%	- 4%
Stewart Indian High	5%	2%	- 3%
Blackwater Community	2%	0	- 2%
Casa Blanca Day	2%	0	- 2%

VI. Discussion of Results

Table 57 provides the reader with a picture of the dropout rates among Pima children. Analyses for six schools are presented. Decreases are observable for all schools. Phoenix Indian High School and the Sherman Indian High School led the reductions in dropouts - with 4% at each. Stewart Indian High School lowered its rate 3% while all other schools showed 2% decreases.

Table 58

Comparison Between Number of Gila River Pima Students Attending Post-Secondary Institutions During 1969-70 and 1970-71

Post-Secondary Institution	Attendance	
	1969-70	1970-71
Vocational Training	13	110
College	69	90

Discussion of Results

Post-secondary attendance for Gila River Pima students on a two-year basis is presented in Table 58. The data suggests that an increase in enrollment has occurred among Pima college students while a slight decrease is noticed for students attending vocational technical schools.

S A L T R I V E R D A Y S C H O O L

"OTHER" - Tribal Education Coordinator

I. Vital Statistics

A. School Name and Address: Salt River Day School
Route 1, Box 117
Scottsdale, Arizona 85257

B. Component Cost: $7,341

C. Staffing Pattern: Professional - One Title I Tribal Education Coordinator

D. Number of Students Participating: N/A

E. Component Operator: Narcisse Bighorn
Tribal Education Coordinator

II. Component Objectives

To increase students' motivation, improve the holding power of the schcol, improve classroom attendance, and the number of students involved in higher education programs.

III. Evaluation

A. Comparison of dropout rates among Salt River Pima students in 1969-70 and 1970-71.

B. Comparison of attendanc in post-secondary institution among Salt River Pima students in 1969-70 and 1970-71.

IV. Procedures

The role of the Tribal Education Coordinator is to act as a liaison between the home and school, and the school and tribal education

committees. Students were visited in their homes and at their schools. The Tribal Education Coordinator assisted students with higher education plans, attendance problems, and homesickness at boarding schools.

V. Results

Table 59

Comparison Between Dropout Rates of Salt River Pima Students in Phoenix Area Off-Reservation Boarding Schools in 1969-70 and 1970-71

High Schools	Dropout Rate		
	1969-70	1970-71	Difference (+ or -)
Phoenix Indian	27%	14%	13
Sherman Indian	16%	9%	- 8
Stewart Indian	9%	6%	- 3

VI. Discussion of Results

The Salt River Pima students' dropout percentages are presented in Table 59. Again, data is offered for two years so comparisons were possible. Substantial decreases are evident for Phoenix Indian High School with 13% and Sherman Indian High School with 8%.

Table 60

Comparison Between Number of Salt River Pima Students Attending Post-Secondary Institutions During 1969-70 and 1970-71

Post-Secondary Institution	Attendance		
	1969-70	1970-71	Difference (+ or -)
Vocational Training	14	20	+ 6
College	10	25	+ 15

Discussion of Results

Table 60 provides an analysis of post-secondary attendance for Salt River Pima students during the 1969-70 and 1970-71 school years. It can be seen that increases in attendance have taken place for both college and vocational training. Vocational training increased the most with 15 more students in 1970-71 than 1969-70.

Affective Domain Conclusions

A total of $664,221 was utilized to support projects in the affective domain. The projects served 2,059 students and were staffed by 19 professionals and 38 paraprofessionals. As was shown in the component descriptions and discussion, the methodologies chosen varied considerably. One very perplexing aspect which was evident in most of projects was the evaluation. In those schools which had adequate and accurate student records, e.g., Sherman Indian High School's dropout prevention projects, a reasonable quantitative analysis was possible to assess the project. Sherman was for instance, able to show a 9.1% dropout reduction and 37 fewer drinking incidents per 100 students compared to the previous year. At the other extreme the progressive dormitory at Phoenix Indian High School could not evaluate its stated objectives because no baseline data existed. This situation was present in several schools.

Projects like the dropout prevention-Impact at Stewart Indian High School had a sound evaluation pattern. This occurred primarily because component operators were able to isolate baseline data for both the target group and a comparable control group, thus affording the opportunity for accurate evaluation.

Standardized tests in the affective domain posed another problem. No schools had data from any personality type inventories. So, the FAATE Inventory was developed and was used. It provided a beginning for affective measurement but did not provide definitive data upon

which strong conclusions could be drawn. Also, revised versions did not work well at the elementary level. Particular difficulty was experienced with teacher-made questionnaires. They provided data, but response dichotomies were not maintained making analyses exceptionally difficult.

Projects like the Tribal Education Coordinators defied evaluation other than quantitative reporting and their data on dropouts, for example, cannot necessarily be attributed to their respective activities. The direct causality for the results, good or bad, cannot be isolated because numerous projects conducted at the schools and separate activities at the reservation level often had overlapping objectives. It is equally possible that some project data showed losses in affective behavioral incidents, not because of failure, but because the more stringent record keeping required by Title I, does not compare directly with the data which was available from previous years.

It should be noted that even though problems existed many successes took place. The affective deficiencies among Indian students are a well documented fact, and they are problems which need to be addressed. Through a well planned and sequenced implementation system more valid evaluations will be possible. And, as has been observed, dropout rates can be lowered, self concepts can be improved, and participation can be increased when specialized opportunities are provided. Thus, continued Title I support for programs in the affective domain is in order.

PSYCHOMOTOR DOMAIN PROJECTS

C H A P T E R V I

Introduction

The psychomotor domain refers to the general area of neuromuscular development. This would include health, hygiene, and physical education or fitness. Within the Phoenix Area only one project fell into this category in Fiscal 1971. It was conducted at the Salt River Day School. Because only one project evaluation is being presented, no extensive tables are included relative to cost, students, and staff. The component cost was $11,547. Two full-time paraprofessional Indian aides, one male and one female, conducted the various activities. A total of 133 youngsters was in the original target group. The analyses of results are presented in two tables. The first covers the boys and the second describes the results for the girls who participated.

I

P S Y C H O M O T O R

HIGH SCHOOLS

None

ELEMENTARY SCHOOLS

Salt River Day School

S A L T R I V E R D A Y S C H O O L

I. Vital Statistics

A. School Name and Address: Salt River Day School
Route 1, Box 117
Scottsdale, Arizona 85257

B. Component Cost: $11,547

C. Staffing Pattern: Paraprofessional - Two full-time Title I Recreation Aides

D. Number of Students Participating: 132

E. Component Operator: Anna T. Martin

II. Component Objectives

To increase the physical fitness of 132 elementary students to the 50th percentile as measured by the Glover Physical Fitness Test and AAHPER Physical Fitness Test.

III. Evaluation

Pre-Post Glover Physical Fitness Test

Pre-Post AAHPER Physical Fitness Test

IV. Procedures

Physical fitness and recreational activities were planned and class schedules arranged for the 65 boys and the 67 girls in the target group. The first through third grades were scheduled for three thirty-five minute classes per week while the fourth through sixth grades were scheduled for three forty-five minute classes per week. The activities were designed to increase skills and coordination

as well as to stimulate participation. The children ranged from ages 6-12, and they received supervision and direction from two recreation aides.

V. Results

Table 61

Comparison Between Pre and Post Test Mean Percentile Scores on the Glover Physical Fitness Test and the American Association of Health, Physical Education, and Recreation (AAHPER) Physical Fitness Test Administered in October 1970 and May 1971 for Boys by Age

Test Period	Physical Fitness Test for Boys by Age								
	Glover Physical Fitness Test				Total Mean Percentile	AAHPER Physical Fitness Test			Total Mean Percentile
	6th N=12	7th N=13	8th N=11	9th N=12		10th N=8	11th N=6	12th N=3	
October Pre-Test Mean Percentile Score	38	32	40	28	35	17	20	7	15
May Post-Test Mean Percentile Score	66	79	68	38	63	19	17	9	15
	+28	+47	+28	+10	+28	+ 2	- 3	+2	0

VI. Discussion of Results

Table 61 presents an analysis of the pre-post data for the boys who took part in the project. Two instruments were used to assess student progress. The Glover Fitness Test was administered to target students six through nine years of age while the AAHPER Physical Fitness Test was given to those ten, eleven, or twelve year olds. A total of 65 boys was involved. One quickly sees that

substantial gains took place for the younger population. For example, the seven year olds showed a 47% increase over their pre-test mean. Six and eight year old boys moved their pre-test mean 28%. The nine year old group gained the least at 10%. On an overall mean percentile an increase of 28% was noted. Looking at the pre-test means, the reader can observe that no age group was above the 50th percentile. The older group, ten, eleven, and twelve year olds, did not gain as much as the younger children. Net increases of 2% occurred for the ten and twelve year groups while the eleven year old section lost 3%. On an overall basis no gain was observable for this group. One could hypothesize that the two instruments utilized for measurement in this project are not measuring the same degree of physical fitness as it is difficult to understand why younger students did better than older ones. Also, the relatively small number of students in the older target groups would allow for more variation in mean scores.

Table 62

Comparison Between Pre and Post Test Mean Percentile Scores on the Glover Physical Fitness Test and the American Association of Health, Physical Education and Recreation (AAHPER) Physical Fitness Test Administered in October 1970 and May 1971 for Girls by Age

Test Period	Physical Fitness Test for Girls by Age								
	Glover Physical Fitness Test				Total Mean Percentile	AAHPER Physical Fitness Test			Total Mean Percentile
	6th N=4	7th N=16	8th N=13	9th N=10		10th N=4	11th N=5	12th N=5	
October Pre-Test Mean Percentile Scores	23	40	28	6	24	23	15	17	18
May Post-Test Mean Percentile Scores	61	56	44	12	43	21	18	19	19
	+38	+15	+16	+ 6	+19	- 2	+ 3	+ 2	+ 1

Discussion of Results

Table 62 reports data for the female population which was involved in the psychomotor project at Salt River Day School. It parallels the preceding table which presented the results for males. The data is presented in mean percentiles by age utilizing two separate tests. One, the Glover Physical Fitness Test was used for ages six through nine; the AAHPER Physical Fitness Test was given to those students ten through twelve years of age. A pattern similar to that found for the males is discernible. Comparatively large gains are seen for the younger group while the older children managed to gain only 1%. The largest gain occurred with the six year

olds who showed an increase of 38%. A net loss of 2% was observable for the ten year old section. Again, the smaller sample size for the older group may be a factor, and it should be noted that many target youngsters were selected on the basis of observable obesity and lack of basic coordination. Thus, any appreciable gains may be considered beneficial to the child.

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

C H A P T E R V I I

Bureau of Indian Affairs - Phoenix Area

The Phoenix Area is one of ten areas in the Bureau of Indian Affairs under the jurisdiction of the U.S. Department of Interior. The Phoenix Area's twenty-one schools, located in a three state region comprised of Arizona, California, and Nevada serve approximately 4,876 students. Of the 4,876 students, 2,807 attend boarding schools whereas a lesser number 2,031, attend reservation day schools. Students for the most part attend boarding schools for the following reasons: there is no federal day or public school near their home; social factors which include such things as the absence of home supervision, parents deceased, emotional problems or juvenile delinquency; or they are "push-outs" from public schools. Over 60 percent of the students enrolled in the three off-reservation boarding schools have spent seven or more years in public school prior to enrolling in the Bureau of Indian Affairs schools.

The majority of students (2,912) attend one of eighteen elementary schools located on the reservations. A substantially smaller number (1,947) are enrolled in one of the three off-reservation boarding high schools. However, by grade level, the upper grades constitute the largest enrollment.

Of the 22 tribes in the Phoenix Area schools, the Hopis (1,258) followed by the Apaches (923), and Papago (840), comprise the largest student enrollment.

Background of Title I

The Elementary and Secondary Education Act (Public Law 89-10, 89th Congress, HR 2362) was passed on April 11, 1965. Educationally deprived children in the nation's elementary and secondary schools were to be the recepients of the legislation. In November, 1966, presidential degree, the Bureau of Indian Affairs was authorized to participate in Title I. The Title I expenditures are designed to support supplemental, compensatory education programs involving children meeting poverty, cultural, and educational deficiency criteria which have as their objective raising educational attainment to a level commensurate with the child's age and ability.

Overview of Title I in the Phoenix Area

Criticisms regarding the misunderstandings of Title I, lack of meaningful parental involvement, the general misapplication of funds, etc. in not only the Bureau of Indian Affairs but also in State schools, brought about the need for the Title I administrative gear-up in the Phoenix Area. It was believed by the Phoenix Area Office and the Phoenix Area schools that the criticisms and problem areas noted in the administration, operation, and evaluation of Title I could be greatly reduced by the implementation of an administrative mechanism designed to insure the coordinated involvement of all concerned persons- administrators, teachers, parents, community leaders, students, etc. Consequently, in June, 1970 an administration-evaluation strategy was designed.

In implementing this strategy a Federal Programs Administrator, and three Title I Specialists were hired to act as monitors, trainers technicians, evaluators, and coordinators for the Phoenix Area Title I projects. They carried out three area-wide workshops in addition to providing Title I training and assistance at the local school level. The purposes of the workshops and local training were manifold. They included: (1) to clarify and reinforce the themes and concepts inherent in Title I legislation; (2) to guarantee the assistance needed for adequate testing and evaluation; (3) to design and to implement appropriate student needs assessment methodologies; (4) to create a viable system for the dissemination of information; (5) to assure the ongoing monitoring of projects; (6) to provide for the supervision relative to fiscal accounting; (7) to plan and secure sufficient parental and community involvement; (8) to establish a mechanism for student input into project design and evaluation; (9) to initiate procedures which would facilitate the acquisition of data requisite to future Title I programs; and (10) to explain the varying kinds of support services available to promote successful project implementation.

The Phoenix Area received $1,424,327 in Title I funding during Fiscal Year 1971. Of that amount, $1,424,233 was actually expended as of June 30, 1970. It is apparent that only a very small amount ($114) or less than one-tenth of one percent was not spent for the purposes for which the funds were intended.

The Title I projects were classified into three major categories - cognitive, affective, and psychomotor. The largest expenditures,

$644,221, were in the affective domain, followed by $506,516 in the cognitive, $11,547 in the psychomotor, and $265,043 in the category "Other" which included such things as administration, the art van, music, etc.

A total of 149 staff members were employed to assist in the operation of Title I projects in the Phoenix Area schools. One hundred fourteen were paraprofessional and thirty five were professional staff. The cognitive components funded a total of 77 positions, followed by 57 positions in the affective domain. The cognitive components served the largest number of students, (2,177), closely followed by the affective components which served 2,059. It should be noted that many regular program staff were involved in implementing, operating, and evaluating Title I projects in addition to those personnel paid through Title I funds, in this report each individual regular program staff member included in the tables.

Summary - Cognitive Domain Projects

Projects in the cognitive domain had as their objectives improved reading and communication skills and were classified into three major areas according to the stated objectives - reading laboratories, reading, tutoring, and bilingual aides. Procedures selected for reaching stated goals varied greatly and included such things as special purpose instrumentation, individualized teaching techniques, and specialized personnel.

A total of $506,516 was expended for projects in the cognitive

domain. The utilization of bilingual aides for remediating reading/communication deficiencies received the largest concentration of funds $265,240. Next in line were those projects using a reading laboratory for alleviating deficiencies, $180,054, followed by tutoring programs with $61,222.

The bilingual aides category accounted for the most staff, one professional and 55 paraprofessionals, and served the largest number of students, 1,583, whereas the classification reading tutoring accounted for the least, 4 professionals and 3 paraprofessionals, and with only 179 students served.

The laboratory category seemingly showed the greatest academic gains as exemplified in the Stewart and Sherman laboratory components. The tutoring activities, although producing some gains, were not as successful as the reading laboratories. Bilingual classroom aides did not significantly change growth patterns, nor did these components realize the objectives as set forth in the projects.

Conclusions - Cognitive Domain Projects

From these observations, it would appear that the utilization of bilingual general classroom aides as a procedure for improving reading and communication skill needs is questionable in terms of future funding in Title I projects. If tutoring activities are to be continued, more attention needs to be given to training, the selection of materials and target students, and ultimately, the particular remedial methodology. The results obtained from the analysis of data in the laboratory approach

are the most promising of the three categorical methods. The resultant changes in Fiscal 1972 Title I cognitive components which are based upon this contingent can be found in Chapter VIII, Directions for Change and Improvement in Fiscal 1972.

Recommendations - Cognitive Domain Projects

From the above conclusions, the extension of reading laboratories in both high schools and elementary schools appears promising for reducing the reading and related language deficiencies of students. Tutoring programs utilizing specialized skill-concept materials as opposed to general tutorial approaches also suggests merit. On the other hand, the continuation of general classroom aides as a method for improving reading and related language arts skills is somewhat questionable based on the data reported during Fiscal 1971. This is not to say, however, that other educational benefits were not accrued, but that in terms of the specific project objectives, the successes were marginal.

An overview of project results in the cognitive domain suggests that the more specifically designed, skill-concept oriented programs utilizing specialized equipment, personnel, materials and supplies show the greater gain. Additionally, the issue is not whether to use bilingual aides or not, but whether or not they are operating in specialized skill-concept oriented programs or merely functioning as general classroom aides who assist the teacher without the benefits of specialized material and training.

An additional shortcoming that must be ameliorated is in the

choice of evaluative techniques which are selected to measure the stated objectives. In most instances, only one measure or instrument was employed during Fiscal 1971. It is therefore recommended that all project components utilize a minimum of two testing instruments in order to assure a broader assessment of project results.

Summary - Affective Domain Projects

Projects in the affective domain had as primary objectives the improvement of attitudes and/or the reduction of dysfuctional kinds of behavior. An amount of $644,211 was expended during Fiscal 1971 in the four categories listed under the affective domain, $302,617 to dropout prevention and attendance improvement, $159,779 and $154,134 to self-image improvement and a variety of projects listed in the "other" category, and the smallest amount $27,681 to vocational awareness.

Paralleling the expenditure ratios, 66 staff worked in the dropout prevention programs which served the largest number of students, 1,307. Next in line were self-image, (398), "Other" (314), and vocational guidance (40).

Conclusions - Affective Domain Projects

Dropout prevention programs and others where a reasonable quantitative analysis was possible were able to demonstrate the greatest progress toward meeting stated student objectives, e.g., Sherman and Stewart Indian High schools. A beginning for affective measurement occurred, but because of the scarcity of baseline data from previous years, the project results in many instances did not provide accurate

data upon which strong conclusions could be drawn.

Recommendations - Affective Domain Projects

Because many of the factors contributing to poor academic achievement lie in the realm of attitudes, values, emotions and/or other personality variables, projects in the affective domain merit continued funding. However, a definitive correlation should exist between the procedures utilized in the projects to the specific social and/or emotional difficulties that have been identified as hampering the student's academic progress. Accordingly, student deficiencies must be stated, not only in terms of affective behavior but also in terms of academic behavior, with corresponding objectives and measurement techniques for both.

Summary - Psychomotor Domain Projects

The general area of neuromuscular development refers to projects in the psychomotor domain. Only one psychomotor project in the amount of $11,547 was conducted in the Phoenix Area. Two Indian aides instructed 133 students in basic physical fitness at Salt River Day School. The activities were designed to increase neuromuscular skills and coordination as well as to stimulate participation in school activities.

Substantial gains were noted for the students six through nine years old evidenced by an overall mean percentile increase of 28% as measured by the Glover Physical Fitness Test. Marginal gains, however, were found for students ten to twelve years old.

Conclusions - Psychomotor Domain Project

In comparison to projects in the affective domain, it may be noted that measuring the difference in a child's running speed is much more specific than measuring gains or losses in the development of a self concept. From the above data it would appear, particularly for the younger children, that physical fitness programs can substantially improve neuromuscular development. However, more than one evaluative measure would have been helpful to assure that adequate conclusions are drawn.

Recommendations - Psychomotor Domain Project

Research shows the close relationship between physical fitness and academic achievement in school. Because of the extremely low level of physical fitness observed among many Indian students, it appears desirable to continue physical fitness programs through Title I funding. However, in all instances, the academic deficiencies of the youngsters exhibiting poor physical fitness should be accessed in order to determine if a corresponding increase in academic achievement accompanies improved physical fitness.

General Recommendations

In addition to the above mentioned recommendations which were based upon the evaluation of Fiscal 1971 projects, the following general recommendations for future Title I projects are also made:

1. Proposals should be written, approved, and funded by July 1 in order to assure proper and effective use of funds.
2. The monthly fiscal accounting system mentioned in Chapter III should be continued so meaningful and complete monitoring of

funds can assure that expenditures are commensurate with the project.

3. Inservice training should be conducted during the month of August prior to the implementation of projects in order to facilitate a complete understanding of the intent and spirit of Title I, i.e., parental involvement, evaluation procedures, establishing baseline data, proper selection of target students, and other ramifications essential to successful project operation as determined by specific Title I guidelines and regulations.

4. Inservice training should be offered to all parties who have a genuine and continuing interest in the children in order to obtain optimum local involvement in the planning, implementation, operation, appraisal and evaluation of the projects. These parties would include: parents and community people, students, administrators, and all staff.

5. All staff, professional and paraprofessional, whether funded by Title I or from other sources should be on duty or otherwise available for all inservice training.

6. Inservice training should be conducted at the local school level in order to promote optimum involvement of all concerned parties.

7. Future projects should involve fewer students than in past projects in order to better concentrate services and to provide better surety for reaching project objectives.

8. All component objectives in the affective and psychomotor domains should have corresponding objectives in the cognitive domain so that a parallel evaluation may take place. This would bring the Phoenix Area Title I projects closer to the intent of Title I legislation. The writing of these objectives would be dependent upon data obtained from a comprehensive and on-going needs assessment.

9. All projects should give definite assurance that pre-mid-post testing and resultant data for evaluation be made available to the Phoenix Area Office by: pre, October 1; mid, February 1; and post, June 30.

10. Channels of communication and dissemination should be opened to all parties concerned with the children so that continued planning and analysis can be initiated and perpetuated.

11. Projects and components that have demonstrated success in meeting or surpassing objectives should be considered for future consideration whereas projects or components that have obviously failed

to effect the desired behavioral changes should either be modified to give reasonable assurance of success or be eliminated from future Title I consideration.

12. Projects and components that have evidenced successes should be eventually incorporated into and funded by the regular program in order to provide better compensatory services to more students.

13. A comprehensive program for the dissemination of information from an on-going analysis as well as formal evaluations should be established by all local schools in order to assure more comprehensive involvement and a more individualized assessment of student needs.

15. More funds should be concentrated at the elementary school level in order to remediate deficiencies identified early in the child's academic career and to prevent those deficiencies from hindering the students progress on an accumulative basis.

DIRECTION FOR CHANGE AND IMPROVEMENT IN FISCAL 1972 TITLE I PROJECTS IN THE PHOENIX AREA

C H A P T E R V I I I

Introduction

Typically, reports of this nature end with recommendations. More frequently than not, the recommendations are merely read, sometimes discussed, but seldom result in ensuant changes. Therefore, the final chapter will deal with the changes for improved Fiscal 1972 Title I projects as based on Fiscal 1971 evaluations and subsequent recommendations.

Specifically, comparisons between Fiscal 1971 and 1972 will be drawn in reference to: (1) funds; (2) staff positions funded through Title I; (3) student participation in Title I projects; and (4) other changes.

Funding

During the Spring of 1971 proposals were submitted to the Phoenix Area Office for review and forwarding to Central Office for further proposal review and approval. All projects were funded by the Central Office by July 1, 1971. The Central Office Title I Division is to be commended for their continued assistance and expedience in proposal analysis.

In Table 63 which shows the Phoenix Area Fiscal 1972 Title I components by amount funded, it can be seen that the largest expenditures, $845,322, are being concentrated in cognitive domain components. Within this domain the majority of the funds, $679,621, are being utilized in reading laboratories. Comparing Fiscal 1971 components, to those funded in Fiscal 1972 shown in Table 64, an increase of $338,806 can be seen in the cognitive domain. Relative to Fiscal 1971, $499,567 was added to reading laboratory programs for Fiscal 1972. (Refer to Chapter III for 1971 reading laboratory expenditures)

The above changes were in accordance with the recommendations to: (1) concentrate funds in the cognitive domain projects in order to be more in line with the intent of the legislation; and (2) continue and expand those programs which demonstrated success in reducing educational deficiencies during Fiscal 1971, i.e., reading laboratory approaches.

Following the recommendation that more funds be concentrated in the elementary grades, it can be seen in Table 65 that an additional $262,473 or $97 more per pupil will be spent at the elementary school level during Fiscal 1972.

Table 63

Phoenix Area Fiscal Year 1972 Title I Components by Amount Funded
by Agency or School

Agency or School	Phoenix Area FY 1972 Title I Components by Amount Funded										
	Cognitive				Affective				Psycho-motor	Other	Total
	Reading Lab	Reading Tutoring	Bilin-gual Aides	Math or Special Educ.	Self Image	Drop-out Preven-tion	Voc. Aware-ness	Other	Physical Fitness	Misc/Adm Clerical & Coor'tn	
High Schools											
Phoenix Indian				11,471		123,005				5,524	140,000
Sherman Indian	29,048					42,128	16,950			6,000	94,126
Stewart	52,317			20,981			25,206				98,504
Elementary Schools											
Ft Apache Agency											
Cibecue Day	84,474										84,474
John F Kennedy	19,779										19,779
Theodore Roose-velt Boarding	45,341				29,999						75,340
Hopi Agency			46,839								46,839
Hopi Day	31,947								8,430		40,377
Hotevilla Day	25,352										25,352
Keams Canyon	73,010								28,476		101,486
Moencopi	11,440										11,440
Polacca	37,902				7,217				3,47[illegible]		48,591
Second Mesa	59,318								5,703		65,021
Papago Agency	148,834										148,834
Pima Agency		86,410							7,032		93,442
Salt River Day	42,846					8,863			5,495		57,204
Supai Day School	18,013										18,013
Phoenix Area Ofc									121,082		121,082

Table 64

Comparison Between Amounts Funded in Components
by Title I Funding Year

Title I Funding Year	Phoenix Area Title I Components by Amount Funded				
	Cognitive	Affective	Psychomotor	Other - Miscellaneous/Clerical/Administration/Coordination	Totals
FY 1971	$506,515	$644,221	$11,547	$262,043	$1,424,327
FY 1972	845,322	253,368	46,081	145,133	1,289,904
Difference (+ or -)	+ $338,806	- $390,853	+ $34,534	- $116,910	

Table 65

Comparison of Title I Per Pupil Expenditures in High Schools and Elementary Schools by Funding Year

Funding Year	Number of Students		Amount Approved		Per Pupil Expenditure	
	High School	Elementary	High School	Elementary	High School	Elementary
1971	2,134	2,742	$ 631,808	$ 573,719	$ 296.00	$ 208.00
1972	2,134	2,742	332,630	836,192	156.00	305.00
Difference (+ or -)			-$ 299,178	-$ 262,473	-$ 140.00	+$ 97.00

Title I Salaried Staff

Paralleling the shift in funding, there can be noted a corresponding increase in both professional and paraprofessional staff in the cognitive domain projects.

As seen in Table 66, 47 more staff have been added in reading laboratories for Fiscal 1972 projects. (Refer to Chapter III for Fiscal 1971 staffing patterns.) The overall changes between Fiscal 1971 and 1972 Title I staffing patterns are shown in Table 67. The impact of the recommendations to utilize both professional and paraprofessional staff in specialized skill concept oriented programs as well as to concentrate efforts on methods that have domonstrated success is evidenced by these changes. Regular program staff members, not salaried by Title I but serving in Title I projects, show similar patterns of concentration on the successful cognitive domain components.

Table 66

Number of Professional and Paraprofessional Staff Positions Funded by Title I in Fiscal 1972 by Kind of Component by Agency or School

Agency or School	Components by Number of Staff Positions																					
	Cognitive								Affective								Psycho-Motor		Other		Totals	
	Reading Lab		Reading Tutoring		Bilingual aides		Math/ Spec. Educ.		Self Image		Dropout Prevention		Voc. Awareness		Other		Physical Fitness		Mis/Cler/ Admin/ Coord'tn			
	P**	Pp*	P	Pp	P	Pp	P	Pp	P	Pp	P	Pp	P	Pp	P	Pp	P	Pp	P	Pp	P	Pp
High Schools																						
Phoenix Indian							1	1	7												8	1
Sherman Indian		1								7				1						1	-	10
Stewart Indian	3	1					1	1					1	1							5	3
Elementary Schools																						
Fort Apache Agency																					1	5
Cibecue Day	1	5																			-	3
John F. Kennedy		3								1											-	7
Theodore Roosevelt		6				9															-	9
Hopi Agency																					-	3
Hopi Day		3																			1	1
Hotevilla Day	1	1															1	2			2	6
Keams Canyon Brdg	1	4																			-	1
Moencopi Day		1								1								1			-	3
Polacca Day		2																			2	3
Second Mesa	2	2																		1	4	14
Papago Agency Schools	4	13																		1	4	5
Pima Agency Schools			4	5																	2	4
Salt River Day Sch	1	4							1												1	1
Supai Day School	1	1																	4	1	4	1
Phoenix Area Office																						
Total	14	47	4	5	0	9	2	2	8	9	0	0	1	2	0	0	1	3	4	4	34	81

*Pp = Paraprofessional **P = Professional

Table 67

Comparison Between the Number of Professional and Paraprofessional Staff Positions Funded by Title I by Component and Funding Year

Title I Funding Year	Components by Number of Professional and Paraprofessional Staff										
	Cognitive		Affective		Psychomotor		Other - Misc./ Admin/ etc.		Totals		
	Prof.*	Para.**	Prof.	Para.	Prof.	Para.	Prof.	Para.	Prof.	Para.	Total Staff
FY 1971	11	66	19	38	0	2	5	8	35	114	149
FY 1972	20	63	9	11	1	3	4	4	34	81	115
Difference (+ or -)	+ 9	- 3	-10	-27	+1	+1	-1	-4	- 1	-33	- 34

*Prof. = Professional

**Para. = Paraprofessional

Students Participating in Title I Projects

Table 68 shows that the number of students who will participate in Fiscal 1972 projects. The cognitive component will serve the most students, 2,522, followed by affective components, 1,206, and psych - motor, 443. The largest single total of any component is the 1,484 students who will be served in reading laboratories.

Comparisons between student participation in Fiscal 1971 and 1972 projects can be found in Table 69. For example, (345) more students will participate in projects in the cognitive domain; (853) fewer students in the affective domain; (310) more students in the psychomotor domain; and 100 less in the "Other" category. All components show changes in numbers of students to be served. These changes correspond to the recommendations that students be placed into components which have academic objectives and that have evidenced success. It also allows concentration on fewer students thereby showing a more reasonable promise for having an impact upon behavioral change.

Table 68

Number of Students Participating in Title I Projects in Fiscal 1972 by Components by Agency or School

Agency or School	Number of Students Participating by Component										
	Cognitive				Affective				Psycho motor	Other	Total
	Rdg Lab	Reading Tutoring	Biling. Aides	Math/Sp. Educ.	Self Image	Dropout Prevt'n	Voc Awareness	Other	Phys. Fitness	Adm/Misc Etc.	
High Schools											
Phoenix Indian						440					440
Sherman Indian	250					150	120				520
Stewart Indian	125			60			50				235
Elementary Schools											
Fort Apache Agency											80
Cibecue Day	80										33
John F. Kennedy	33										496
Theodore Roosevelt	146				350						690*
Hopi Agency			690*						61		114
Hopi Day	53										28
Hotevilla Day	28								129		285
Keams Canyon Brdg	156										20
Moencopi Day	20								164		277
Polacca Day	83				30				89		140
Second Mesa Day	51										347
Papago Agcy Schools	347										288
Pima Agcy Schools		288									132
Salt River Day Sch	66					66					46
Supai Day School	46										
Phoenix Area Ofc											
Total	1,484	288	690*	60	380	656	170		443		
Component Totals	2,522				1,206				443		

* Hopi Agency Title I Contribution to the Follow-Thru Program

Table 69

Comparison Between the Number of Students Participating in Components by Funding Year

Funding Year	Components by Number of Students Participating				
	Cognitive	Affective	Psychomotor	Other - Music, science, etc.	Totals
FY 1971	2,177	2,059	133	100	N/A
FY 1972	2,522	1,206	443	0	N/A
Difference (+ or -)	+ 345	- 853	+ 310	- 100	N/A

Other Changes

The recommendations regarding inservice training led to a partial remediation of the problems which brought about those suggestions for change. In each project, local inservice training did occur in August, 1971 prior to project implementation and did include the participation of individuals representing all concerned parties.

In order to comply with regulations regarding local parental and community involvement, it was recommended that Title I projects be planned at each local school. Table 63 shows that for Fiscal 1972 seventeen projects originated from school levels as opposed to nine in FY 1971. (See Chapter III).

Not all recommendations for change have been fully realized, and, at the time of this writing, it is impossible to determine if others will be met. However, Fiscal 1972 projects reflect the willingness of all concerned parties in the Phoenix Area - Bureau of Indian Affairs to be accountable to Title I regulations, and to the welfare of the students for whom the law was written.

EPILOGUE

C H A P T E R I X

In order to successfully design, implement, coordinate, and evaluate a Title I program, a tremendous amount of time and effort is required from many different factions. Parents, students, school personnel, and representative community people must be pulled together to form a cohesive, functioning unit. The final result of their collective input, i.e., the actual classroom activity created to remediate a specific educational deficiency, represents only a small portion of the total involvement which has evolved behind the scene. For example, one must consider the many hours and the distances traveled to attend the countless meetings which take place in order to effect a clear understanding of Public Law 89-10, to initiate a comprehensive need assessment system, to discuss and define behavioral objectives, to document and prioritize deficiencies, and ultimately, to actually write a Title I proposal. These procedures are by no means a simple task. Indeed, they constitute a formidable challenge.

If the overall Title I efforts within the off-reservation boarding high schools and within the schools of the Apache, Hopi, Papago, Pima, and Havasupai tribes are viewed collectively, then one thing is clearly evident. The Indian community and school people <u>have</u> accepted the

challenge. Literally hundreds of people have demonstrated their commitment to meaningful involvement in the educational process and their willingness to work toward providing a better educational environment for Indian children. Each person is to be commended for his or her contribution to the Title I program in the Phoenix Area during Fiscal 1971. Ideas have been shared, the voices of Indian people have been heard, goals have been clarified, and most importantly, the real needs of Indian children have been realized. Without this combined effort among all concerned, this report would not have been possible.

This report was typed by Geraldine M. Williams.